ABSTRACT OF

Lumleian Lectures

ON THE PATHOLOGY OF INTRA-UTERINE DEATH.

Delivered at the Royal College of Physicians of London, March, 1887,

BY W. O. PRIESTLEY, M.D., F.R.C.P., LL.D.,
CONSULTING PHYSICIAN TO KING'S COLLEGE HOSPITAL, AND LATE PROFESSOR OF OBSTETRIC MEDICINE, KING'S COLLEGE.

LECTURE I.

CALLING attention to the importance of the subject which he had chosen for these lectures, not only in its general aspects and from a statesman's point of view, as influencing the law of population, but in its interest for the pathologist and medical practitioner, Dr. Priestley said that owing to the large extent of ground covered by it he must content himself with giving in outline a sketch of its broader dimensions, while he dwelt with greater detail on those sections which had more especially excited his interest, or in which he had personally made some investigation. The complex and intricate anatomical structure, and the alterations associated with the rapid development of the contents of the gravid uterus even in the normal state, render, the lecturer remarked, all investigation very difficult. When pregnancy pursues its natural course and development follows its normal progress, the changes which take place are incessant and varying. From the time at which the decidua is first formed in the interior of the uterus, to become the outermost of the fœtal membranes, to the formation of the fully-grown placenta, there is no pause or cessation in the active changes which characterise the progress of growth. The cells and fibres which build up the tissues day by day undergo progressive change, and the vessels equally undergo modification in size, form, character, and in their relation to surrounding parts. So, too, if any derangement occurs, either from accident or disease, the morbid change thus initiated is, or may be, impressed with the same activity of growth, rapid degeneration or abnormalities being produced with surprising quickness. Hence pathological researches into these unstable and ever-changing structures are beset with difficulties, and to this must be attributed the widely different views held by equally conscientious and accurate observers concerning the nature of some of the pathological results.

Many of the causes which either remotely or directly bring about intra-uterine death are very difficult to trace, and some are so subtle in their influence as to be impossible to detect. Thus the child dies in utero with some women in successive pregnancies and without any clearly assignable cause; it is not infrequent to hear of women apparently healthy aborting or losing their children in the later months of gestation ten, twelve, or thirteen successive times. Some women are so prone to miscarriage at any period of gestation, that the slightest imprudence seems to be enough to endanger the existence of pregnancy and to lead to a detachment of the ovum. This is in marked contrast to other and apparently not healthier women, who will bear an extraordinary amount of violence or injury without disturbance to pregnancy, in proof of which Dr. Priestley cited several instances from the experiences of Mauriceau, Henry Davies, Dupuytren, Laujardière, and himself. Whitehead's tables, taken from the records of the Manchester Lying-in Hospital, show approximately the frequency of embryonic death in the earlier stages of gestation, but do not accurately represent the frequency of abortion throughout the whole childbearing period, and a considerable proportion of the women included in them were pregnant for the first time. Dr. Priestley had recently drawn up tables containing the figures of some 400 private patients in whom the evidence of pregnancy having occurred was distinct and unequivocal. The results were as follows: 400 women had been pregnant 2325 times. Of these, pregnancy had resulted in living children 1783 times, and there had been 542 abortions. The proportion of abortions to children was therefore 30·40 per cent., or about 1 in 3; while the proportion of abortions to pregnancies was 23·32, or about 1 in 4. The number of women who had borne children but had never suffered abortion was 152 in the 400, or 38 per cent.; while the number of women who had borne no living child and only had abortions was 27, or 6·75 per cent.—the sum of the pregnancies in 400 women being therefore 2325, or 5·81 for each, and the sum of the abortions being 542, it was 1·35 for each.

TABLE I.—*Analysis of number of Women who had and had not Aborted.*

—	Women below 30 years of age (Whitehead).		Women over 40 years of age (Priestley).	
	No.	Per cent. of whole.	No.	Per cent. of whole.
Women who had not aborted ...	1253	62·65	152	38·00
Women who had aborted	747	37·35	248	62·00
Total number of women under observation	2000	100·00	400	100·00
Women who only aborted—that is, who had borne no living child	—	—	27	6·75

Table I. illustrates the point that whereas among the younger women the proportion who aborted was about one in three—that is, one aborted to two who did not—among the older women the proportion was almost exactly reversed, and two aborted to one who did not.

TABLE II.—*Analysis of Pregnancies in reference to Abortions and to Fecundity.*

—	2000 Women below 30 years of age (Whitehead).			400 Women over 40 years of age (Priestley).		
	No.	Per cent. of whole.	No. per woman.	No.	Per cent. of whole.	No per woman.
Children	7459	85·92	3·73	1783	76·68	4·46
Abortions	1222	14·08	0·61	542	23·32	1·35
Total pregnancies ...	8681	100·00	4·34	2325	100·00	5·81

Table II. shows that the older period is more productive of pregnancies than the younger in the proportion of 5·81 to 4·34 (or four to three), but that the percentage of them terminating in abortions is also much greater in the older period than in the younger (23·32 against 14·08). Table III. illustrates the last point in another manner.

TABLE III.—*Ratio of Abortions to Pregnancies and Children.*

—	Whitehead.		Priestley.	
	Per cent.	Being about 1 in	Per cent.	Being about 1 in
Ratio of abortions to pregnancies	14·08	7	23·32	4¼
Ratio of abortions to children ...	16·39	6	30·40	3¼

It will be seen that the proportion of abortions to full-time pregnancies is considerably higher than Hegar's computation, which is about 1 abortion to every 8 or 10 full-time deliveries. The proportion approximates more closely to Dr. Whitehead's figures, but there is a larger average of abortions as the calculation embraces a longer portion of the reproductive period; and there is another notable difference, which may, perhaps, be put down to easier circumstances and exemption from bodily toil—namely, that if a comparison is made with Dr. Whitehead's limited data concerning those women who had passed the menstrual epoch, it will be remarked that while among the poor of the manufacturing town as many as 87 per cent. had incurred abortion, only 62 per cent. of the women in better circumstances had suffered in this way.

As to the particular pregnancies in which abortion most

frequently takes place considerable difference of opinion exists, and Dr. Priestley regards the computations on the subject made by Tyler Smith, Whitehead, and Schroeder as not at all satisfactory or conclusive, inasmuch as various elements—age, social position, the occurrence or not of a long journey immediately after marriage &c.—are not considered, and these elements are important factors in making the calculation, more particularly with reference to abortion in the earlier periods of pregnancy.

The relative period of utero-gestation in which intra-uterine death most frequently takes place has been variously stated, and for certain reasons cannot be very precisely determined. It is probably very frequent in the form of abortion during the early weeks of pregnancy, and then it may produce so little disturbance in a woman's health as to be scarcely noticed. Among the poor this is certainly the case, and consequently an estimate of its frequency among them is practically impossible. Madame la Chapelle regarded it as most frequent in the sixth month of utero-gestation. Cazeaux believes abortion to be most frequent in the first two or three months, and Depaul states its greatest frequency to be between two months and a half and three months and a half. Jacquemier, on the other hand, declares abortion is not less frequent in the sixth month than in the first half of pregnancy. Whitehead's figures show that of 602 cases of abortion, 275 occurred between two months and a half and three months and a half, and 147 between three months and a half and four months and a half.

The stage at which development has arrived—about three months to three and a half—points to a period when, *pro tanto*, abortion may be supposed to be the more readily brought about, which coincides with Whitehead's statistics. Then the villi of the chorion have become more concentrated on the decidua serotina, and the young placenta is in progress of formation. There is great increased vascular activity in all the tissues, and yet a certain instability, for the vascular loops projected from the maternal circulation are beginning to surround the fœtal villi in a delicate sort of network, and the spaces which intervene between the membranes, so obvious in the earliest weeks, are not yet obliterated. Besides, the union between the membranes and the uterine walls is less stable than later on, and so separation more readily occurs. Hence a greater liability to blood extravasations, not only into the layers of the decidua, but also between the several membranes, and more especially between the decidua reflexa and the chorion. From the twelfth to the sixteenth week the phenomenon of "quickening" occurs, and if anything hinders or prevents the ascent of the uterus into the abdomen abortion is precipitated. Morgagni and Desormeaux are of opinion that abortion is more frequent with female than with male embryos, but give no statistics; and Cazeaux's reason for thinking this may be true is scarcely a sound one—namely, because at term there are sixteen boys born to every fifteen girls.

In discussing the causes of intra-uterine death, classifications of which have been made by Spiegelberg, Leopold, Barnes, and others, Dr. Priestley announced his intention of taking first the causes acting through the male parent; then those which act through the intervention of the mother; and, lastly, those which more particularly belong to the fœtus itself, although possibly remotely related to both parents.

1. *Causes of intra-uterine death referable to the father.*—As the pollen-cells of a plant are sometimes imperfectly developed as the result of an unhealthy state of the plant, or as the pollen may be injured or spoilt before or during the time it is applied to the pistil, and the result be an imperfectly formed seed or fruit which never reaches maturity, so death of the embryo after conception is due, in some cases at least, to defects in the male parent. The fault is, as it were, *ab initio*. Conception takes place, but it is vitiated from the beginning *by* some alteration in the fecunding fluid. The male parent may be too young or too old to impart the necessary potency to the spermatic fluid, and so the product of conception breaks down and drops like untimely fruit because it does not possess the necessary amount of vitality to prolong its development. Debauchery, various diseases, and injuries from which men suffer were then alluded to as so deteriorating the constitution as to impair the procreating power, and so cause abortion in the woman. As pointed out by Dévilliers, procreating power is essentially distinct from that of development, and hence a man may possess the power to fertilise, but his whole strength may be expended in this act, and may not extend beyond, so that there is no further development. The faculty of development, too, is relative. Thus a weak man may impregnate a robust woman, and, by so much as she has strength to impart, the vitality of the germ may be carried on entirely under the influence of the woman. The lecturer had not been able to procure any precise information as to the proclivity to abortion in the wives of men who were the subjects of albuminuria or saccharine diabetes; but the general outcome of opinion is that during the progress of these maladies the vital powers become so exhausted that sexual power and desire fall into abeyance, and that it is only during the slighter forms of disease that they are likely to continue. Lead-poisoning not only injuriously affects the child *in utero* when the mother is the subject of it, but indirectly also when the father is affected. In this way it may lead to the death of the fœtus *in utero* and produce abortion or premature expulsion. The most potent, however, of all poisons in producing intra-uterine death at all stages of pregnancy is the poison of syphilis, and this whether the disease exists in the male or in the female parent. A woman who has shown no sign of syphilis in her own person may be impregnated by a spermatic fluid which carries with it so potent a syphilitic virus that in its development it sooner or later kills the product of conception, and this in its turn so poisons the maternal blood that the woman eventually becomes tainted with constitutional syphilis. Several instances in illustration of this indirect influence of syphilis in the male on conception were quoted from the experiences of Charpentier, Professor Harvey, Jonathan Hutchinson, and others.

2. *On the part of the mother.*—The same general causes which influence sterility are concerned in a greater or less degree in the production of abortion and premature death of the fœtus—viz., constitutional conditions, external agencies which depress the general health, extremes of heat and cold, climate, locality, &c. Over-feeding, Dr. Priestley is of opinion, is more pernicious in its effects on the product of conception than under-feeding. Anæmia in the mother may cause death *in utero*, and old age is not favourable to the continuance of pregnancy. Some acute diseases of a specific kind in the mother have a very marked and direct influence in destroying fœtal life: in proportion, *ceteris paribus*, to the gravity of the maternal affection, so is the danger to her progeny. Small-pox was given as an example, but scarlatina, measles, erysipelas, diphtheria, typhoid fever, and its congeners come within the same category. Of the non-specific forms of disease attended by fever, Dr. Priestley instanced pneumonia, which has always a special gravity when complicated by pregnancy, and which, if severe, almost invariably leads to emptying of the uterus. Pleurisy and the feverish state which follows surgical operations generally lead to abortion. Increase in the temperature of the mother increases the fœtal pulse, and *vice versâ;* and the experiments of Runge on the effects of high temperature on the gestation of the lower animals published in 1877 were reviewed at length, their results being as follows:—(1) The temperature of the fœtus is habitually higher than that of the mother, and keeps higher when the mother's heart becomes abnormal; (2) the fœtus dies solely from the heat before it becomes fatal to the mother; and (3) the temperature of the mother, if only raised for a short period to 41·5° C., is fatal to the fœtus, the danger not ceasing with the reduction of the mother's temperature to normal. These conclusions have been confirmed by a series of experiments recently performed under Dr. Priestley's direction by Mr. Tyrell Brooks in the physiological laboratory of King's College. In the course of these inquiries a marked difference was found between the vaginal, the uterine, and the fœtal temperature: thus in the cat, vaginal 98·2°, uterine 98·4°, fœtal 99°. In eclampsia fœtal death may be due to such elevation of temperature in the mother's body as is incompatible with the safety of the child, but when the temperature does not reach so high a standard the death must be attributed to uterine contraction producing imperfect aeration of the blood, or vitiation of the blood from uræmic poison. In phthisical women the tendency to abortion and premature delivery is greater than in healthy women. Diabetes, jaundice, heart disease, malignant cholera, and allied morbid conditions may destroy the product of conception by poisoning it *in utero*, or by inducing uterine contractions and premature expulsion. Several poisons act deleteriously on pregnancy—lead, arsenic, mercury, savin, and the like. The most pernicious organic poison is, however, syphilis, and in women who are its subjects, abortions often succeed each other in frequent

repetition, and with a persistency belonging to no other cause. Even when there are no external indications of maternal syphilis, the succession of abortions or of dead children in more advanced pregnancy is traceable to a latent form of the disease which manifests itself in this fashion. If a woman has syphilis before conception, she is much more predisposed to abortion than a woman taking the disease after conception; if conception and syphilis commence together, abortion and premature labour with a dead child are the rule, but treatment is more potent in preventing them; syphilis acquired after the mid-period of pregnancy has less influence on the child, and it may escape altogether. One of the ways in which syphilis brings about intra-uterine death is by producing disease in the fœtal appendages; the venereal poison is transmitted to the embryo through the maternal blood, and may affect any or all of the tissues in the gravid womb. Uterine congestion or displacement, leucorrhœa, oxytoxic medicines, and reflex motor actions induced by minor surgical operations (tooth-drawing, &c.), have the effects of inducing abortion in some cases. All surgical proceedings during pregnancy ought to be abstained from, but if such operation be absolutely necessary the time corresponding to the catamenial periods must be avoided, the uterus being at such times more irritable. Dr. Priestley concluded his lecture by briefly referring to the effects of persistent gastric irritation, vesical, renal and rectal irritation, ovarian irritation, and finally to the injurious influence of mental emotion—fright, anxiety, &c.

A Lecture

ON THE

NEW METHOD OF TREATMENT OF CONSUMPTION AND OTHER DISEASES OF THE RESPIRATORY ORGANS BY GASEOUS RECTAL INJECTIONS.

BY I. BURNEY YEO, M.D., F.R.C.P.,

PROFESSOR OF CLINICAL THERAPEUTICS IN KING'S COLLEGE, AND PHYSICIAN TO KING'S COLLEGE HOSPITAL.

GENTLEMEN,—Occasional paragraphs in the medical journals have called attention during the past few months to a method of treating consumption and other affections of the organs of respiration which, whatever may be the ultimate estimate of its value, certainly possesses the characters of originality and novelty. I allude to the employment of gaseous rectal injections introduced and practised by Dr. Bergeon, a well-known physician at Lyons, and formerly a *professeur suppléant* in the School of Medicine in that city. Dr. Bergeon brought this subject before the Académie des Sciences and the Académie de Médecine in Paris through Professor Cornil, the eminent pathologist, last summer. Since that time it has been adopted by several eminent physicians in Paris, including Dr. Dujardin-Beaumetz of the Hôpital Cochin, Dr. Constantin Paul, and Dr. Chantemesse, Chef du Laboratoire de Bactériologie in the Faculty of Medicine; by Dr. Vaillet, Professor in the University of Geneva; by Dr. Queirel, Professor in the School of Medicine at Marseilles; and by other eminent practitioners of medicine on the continent of Europe. Our own countryman, Dr. Henry Bennet of Mentone, has written a warm eulogium of its effects, and has claimed for this method "serious consideration and trial." I have thought it my duty, as Professor of Clinical Therapeutics in this College, to make further inquiry into this method, to familiarise myself with its details, and to put it into practice before your eyes. In order to do this, I first communicated with my friend Dr. Leudet of Paris, who has had a very large experience in the treatment of affections of the respiratory organs at Eaux Bonnes, and begged him to inform me what impression his observation of this treatment had made upon him. He replied that there was certainly "something in it," and kindly offered, if I would come to Paris, to obtain for me opportunities of seeing it carried out there. I therefore at the end of last year paid a short visit to Paris for the purpose of informing myself thoroughly of the details and results of this method so far as at present ascertained. My best thanks are due to Dr. Dujardin-Beaumetz, to Dr. Bardet, the able Chef du Laboratoire Thérapeutique of the Hôpital Cochin, and also especially to Dr. Leudet for so kindly affording me all the information I required. I may say at once that I agree with Dr. H. Bennet in considering this method as having been attended with results which would make it culpable in us to disregard it or fail to avail ourselves of such opportunities as we possess to give it a fair and persevering trial. I am, moreover, disposed to believe that the local application of sedative gases and vapours, which this method makes easy, may prove of considerable service in other affections, and especially in the treatment of uterine and intestinal maladies.

Dr. Bergeon's original object was to discover some means by which the development of the tubercle bacillus should be hindered; this does not necessarily mean the destruction of the organism *in loco*, but the modification of its probable chemical action on the tissues, so as to render it harmless. And here I would like to point out that those who have been in haste to repudiate antiseptic medication as applied to the treatment of phthisis, because of the necessity, as inferred from laboratory experiments, of administering such large doses (if the bacillus is to be destroyed) as to render them actually toxic, have really been most illogical and unscientific in their imagined submission to scientific experiment. A narrowness of view is, I regret to say, not inconsistent with an assumption of scientific accuracy. It has not as yet been proved in what way the bacillus acts in destroying pulmonary tissue, and in determining the production of the disease known as pulmonary consumption; and it does not help us to say that it sets up inflammatory changes, and then determines a certain kind of degeneration in the products of inflammation. These are only phrases which explain nothing. Numbers of other microbes reach the lung and do little or no harm there, their mere presence proving harmless! I beg you to mark that.

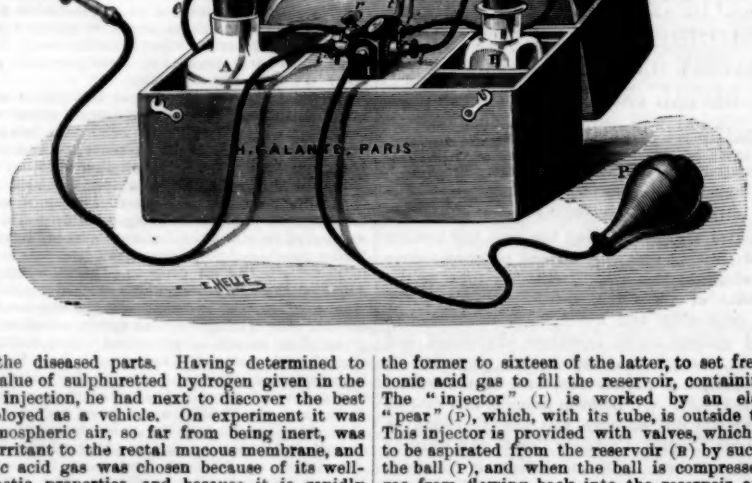
Are we to assume that it is impossible so to alter the medium, the soil, the surroundings (whatever you like to call it) in which the tubercle bacillus is found and where it develops, as to reduce its presence to the same condition of harmlessness as that of a number of other microbes? It would be most illogical and absurd to do so. It is this idea that is in the minds of those who speak of an "antiseptic" treatment of phthisis as being possible and necessary. One method of fulfilling this indication would be to cause gaseous bodies capable of modifying the development of the bacillus to penetrate the air cells and parenchyma of the lungs. Amongst the substances which seemed capable of doing this were sulphuretted hydrogen and the vapour of bisulphide of carbon. The inhalation of the spray, as well as of the vapours given off by natural sulphuretted waters, and the administration of such waters by the stomach, have long been held in high repute, especially in France, in the treatment of consumption and other chronic diseases of the respiratory passages. In the autumn of 1876, some years before the publication of Koch's discovery of the tubercle bacillus, in a paper I contributed to the annual meeting of the British Medical Association on "Recent Researches in the Treatment of Phthisis," in referring to the use and action of sulphur waters, I used these words: "I am by no means sure that we shall not discover that many of our remedies for phthisis act *antiseptically* which are thought by many to act otherwise. May not the sulphurous mineral waters, such as those of Eaux Bonnes, act in this way?"

Other vapours were also tried by Dr. Bergeon, such as gaseous iodoform and eucalyptol. This observer had not been able to obtain all the good effects he desired from the use of antiseptic vapours by inhalation; and although, for my own part, I have had most convincing proof that such a mode of administration is attended with benefit in most cases, and with very remarkable amelioration in some, it requires a steadfastness of purpose and a constancy of application on the part of the patients and their friends, as well as on the part of the physician, that are but rarely met with. Without great thoroughness in this mode of applying antiseptic vapours, no doubt they penetrate but very imperfectly to the often diffused and deep-seated foci of disease; moreover, some of these gases would prove poisonous when admitted into the lungs by inhalation. This is the case with sulphuretted hydrogen, which is

highly poisonous when respired in certain proportions, and it produces serious effects on the blood-corpuscles when it passes into the arterial circulation. Diffused in *small* proportions through the atmosphere inhaled, it has for many years, as I have already stated, formed a part of the regular treatment of affections of the respiratory organs at sulphur spas, such as Eaux Bonnes, Luchon, Cauterets, &c.

It was through calling to mind the experiments of Claude Bernard on the absorption of gases by the large intestine that the method of gaseous rectal injection suggested itself to Dr. Bergeon. C. Bernard discovered that gases were readily absorbed by the large intestine, and that when thus absorbed they passed into the portal circulation, and thence into the pulmonary artery, and there came into contact with the pulmonary parenchyma, and were eliminated (if the dose had not been too large) through the lungs. He found that, if a small quantity of a weak solution of sulphuretted hydrogen were injected into the rectum, it was eliminated without any ill effects by the lungs; while the same quantity respired under a glass jar would be toxic. In administering gases by the rectum, it is, of course, necessary to inject only such an amount as can be readily eliminated by the lungs, otherwise the whole would not be separated and a portion would pass into the arterial system. After a series of test experiments, Dr. Bergeon found that by the method of rectal injection he could administer relatively large doses of antiseptic gases, and it was clear that in elimination they would be distributed over the whole parenchyma of the lungs, and so of necessity come into contact with the diseased parts. Having determined to ascertain the value of sulphuretted hydrogen given in the form of rectal injection, he had next to discover the best gas to be employed as a vehicle. On experiment it was found that atmospheric air, so far from being inert, was a very active irritant to the rectal mucous membrane, and finally carbonic acid gas was chosen because of its well-known anæsthetic properties, and because it is rapidly eliminated. The method employed by Dr. Bergéon was a very simple one. An indiarubber bag, holding from four to five litres, was filled with pure carbonic acid, and this was connected with an elastic ball, the working of which withdrew the gas from the bag containing it and drove it into a bottle—the "barboteur" as it is called in French,—which held a solution of sulphuretted hydrogen or of bisulphide of carbon. In its passage through this solution the carbonic acid gas became charged with the sulphuretted vapours, and this mixture of gases was very slowly injected into the rectum through a tube terminating in an ordinary bone cannula. In the apparatus constructed for this purpose by Dr. Morel, Dr. Bergéon's assistant, the carbonic acid was generated by adding dilute sulphuric acid to bicarbonate of soda. The gas given off was collected in an indiarubber bag, which, when filled, was detached and then connected with the bottle containing the sulphur water or other agent. The following were the objections to this apparatus:—1. That, as the injecting ball was placed in front of the "barboteur," it was difficult to feel the sensation of *resistance* offered by the rectum, as there was a long tube, as well as the fluid in the bottle, between them. This "resistance offered by the rectum" is sometimes very manifest, as we found in the first two cases in which we applied this method. 2. The use of *mineral* acid to generate the carbonic acid is attended with the risk of carrying over irritating sulphuric vapours. 3. The price was excessive—viz., 70 francs, or £2 16*s.*!

The apparatus which I have before me, and which we have used in this hospital, was devised by M. Bardet, the Chef du Laboratoire de Thérapeutique at the Hôpital Cochin, at the request of Dr. Dujardin-Beaumetz. It is manufactured by Galante et Fils, the well known instrument-makers, No. 2, Rue de l'École de Médicine, Paris, and it may be obtained from them at the moderate price of 35 francs (see woodcut). This apparatus has the great advantage of having all its component parts contained in one box, and is therefore easily transported from place to place; its manipulation and application are easily learnt, and may be entrusted, after a time or two, to an intelligent attendant, or even to the patient himself. Moreover, the carbonic acid is generated by means of a vegetable acid, which is neither toxic nor corrosive. It consists, as you see, first, of a "generator" (A), and a large glass bottle with a wide mouth, in permanent communication with the indiarubber bag or "reservoir" (B). In the generator the carbonic acid gas is generated, and for this purpose there are furnished with the apparatus small cartridge-like boxes, each filled with the necessary quantity of bicarbonate of soda and tartaric acid (separated by a partition of cardboard), in the proportion of twenty parts of



the former to sixteen of the latter, to set free enough carbonic acid gas to fill the reservoir, containing four litres. The "injector" (I) is worked by an elastic ball, or "pear" (P), which, with its tube, is outside the apparatus. This injector is provided with valves, which allow the gas to be aspirated from the reservoir (B) by suction action of the ball (P), and when the ball is compressed prevent the gas from flowing back into the reservoir and cause it to escape by the cannula (C). The bottle (B), called a "barboteur," contains the medicated fluid through which the carbonic acid gas is forced to pass on its way from the reservoir to the injector. The box, then, contains the following parts—a generator of carbonic acid (A), a caoutchouc bag or reservoir (B), a "barboteur" (B), and an injector (I). Outside the box are the injecting ball or pear (P), and the "cannula" (C) with the tubes connecting them to the injector. The injector, which is formed of an arrangement of valves (*i* and *i'*), is made of metal, and is, together with the other connecting portions of the apparatus (*r t t'*), combined together into a single solid block. The gas furnished by the generator (A) passes out by the tube *a*, which is connected at the tap *r* with the central metallic block, whence it escapes by the tube *t'*, through which it reaches the reservoir (B). It cannot escape by *t'*, as it is prevented by the resistance of the liquid in the "barboteur" (B). As soon as the reservoir is filled with gas the apparatus can be put in action. We compress the elastic ball (P), and the air it contains is driven out through the valve *i* and the cannula; then, when it re-expands, it tends to produce a

vacuum, and so opens the valve *i'* and aspirates the gas from the reservoir, which, passing through the tubes *t* and *t'*, reaches the "barboteur" (B) by the tube *v*, which descends to the bottom of that vessel; it becomes charged with the medicinal vapour in passing through the fluid contained in the "barboteur," and then escapes by the exit tube *v'* into the caoutchouc tube connected with the valve *i* and the injector (I); the ball (P) and the injector are then filled with gas. We then compress the ball, and the compressed gas opens the valve *i'* and escapes by the cannula (C), and so on until the reservoir is emptied.

Having described to you the different parts of the apparatus, I will now show you how it is worked. First, you fill the "barboteur" (B) rather more than half-full of the medicated solution you intend to employ (sulphur water, water impregnated with bisulphide of carbon, or hot water containing iodoform, terpinol, &c., in suspension), and you close it tightly with the cork. Secondly, you put a few drops of water into the generator (A) and then empty into it the soda and acid powder contained in one of the little cartridge-like boxes. You wait a few seconds in order that the air contained in this flask may be driven out by the small quantity of carbonic acid, which is set free by the few drops of water which you have placed in the bottom of the vessel previously. You then cork it firmly, and by means of the funnel provided with the apparatus you fill the generator about half-full of water, being careful to see that the tap *r* is open. As soon as the water is added the gas comes off freely, and in about two minutes fills the reservoir; shaking the flask will hasten the discharge of gas. The reservoir being filled, you work the elastic ball (P) three or four times in order to get rid of the air contained in the tubes and in the "barboteur," and then you introduce the cannula into the rectum. The ring on the cannula serves to regulate the length of tube introduced into the rectum and to maintain it there. The injection of the gas must be made very slowly and gently, waiting ten or fifteen seconds between each compression of the ball (P), and taking from twenty minutes to half an hour over the operation. The quantity of gas injected at each operation must depend chiefly on the tolerance of the patient—the minimum being one litre, the maximum about four litres. It is necessary also to take account of a certain amount of resistance to the injection on the part of the rectum encountered during the first two or three attempts with some patients. In this case it is well to wait a few minutes, and then to inject very slowly. As soon as the operation is finished it is necessary to empty and wash out the generator.

It has been stated that Dr. Bergeon, in order to obtain sulphuretted hydrogen in a pure and unirritating form, has hitherto been obliged to confine himself to the use of Eaux Bonnes water. Some bottles of this water are on the table before you. But an obvious inconvenience attends this limitation of the source of the sulphur gas, and, besides, the Eaux Bonnes water is but feebly charged with the gas, and some bottles are found unfit for use, as they yield little or no gas. We have had recourse here to the solutions suggested by Dr. Bardet for generating the sulphuretted hydrogen, and we have found them to answer perfectly. The first of these (No. 1), the sulphuretted solution, contains 10 grammes of sodium sulphide in 100 cubic centimetres of distilled water. This is made by passing pure gaseous sulphuretted hydrogen through a pure solution of soda, subsequently adding a weight of soda equal to that already employed, and then the water necessary to arrive at the strength indicated. A cubic centimetre of this liquid sets free exactly 10 cubic centimetres of sulphuretted hydrogen. No. 2 is an acid solution used for setting free the sulphuretted gas from the preceding; this is made by dissolving 25 grammes of tartaric acid and 1 gramme of salicylic acid in 100 cubic centimetres of distilled water. (The salicylic acid is simply to prevent the formation of mould in this solution.) One cubic centimetre of this solution entirely displaces the sulphuretted hydrogen of 1 cubic centimetre of the preceding. These solutions[1] afford us the means of estimating accurately the quantity of sulphuretted hydrogen administered. It is advisable, as Dr. Bardet points out, even when using a natural sulphur water, to add some solution of a vegetable acid, to set free the sulphur gas; if you do not do so, you will find the carbonic acid acts very slowly in setting free the sulphuretted hydrogen.

With regard to the dose. We have been using here the proportions indicated by Dr. Bardet as giving the best practical results—viz., 10 cubic centimetres of the sulphuretted solution to 200 grammes of water; this mixture is placed in the "barboteur," and 10 cubic centimetres of the acid (No. 2) solution is added. If all the sulphuretted hydrogen were set free from this and mixed with the carbonic acid gas injected, we should obtain a dose of sulphuretted hydrogen equal to 100 cubic centimetres. But there is always a little milkiness produced on the addition of the acid solution, due to the deposition of sulphur, and probably not more than two-thirds or three-fourths of the above stated quantity reaches the rectum, even when the full quantity (4 litres) of carbonic acid gas is injected. As to the quantity of carbonic acid injected, it varies from one to four litres, according to the tolerance of the patient. Dr. Bergeon directs that two injections should be given daily, but in Paris they rarely give more than one, unless the patient can only tolerate a small injection at a time, and then they also give them twice a day. At present we have only given them once daily. Those of you who have seen these injections administered will agree with me that apart from the odour of the gas there is nothing particularly objectionable in this method, either to the medical man or to the patient. But it must be admitted to be a troublesome method, when compared with our routine modes of treatment, and that it takes up much time When, however, we consider the vast amount of time we give to investigations in morbid anatomy, we ought not to complain because modern progress in connexion with experimental therapeutics throws on us additional labour and additional duties in this the most practical and most essential branch of our art. The trouble and labour attending the application of this method make it very desirable that it should be taken up and put into practice, not by one or two physicians only, but by a considerable number, for only in this way can its merits and applicability be tested in a sufficiently large number and variety of cases. Hitherto its application has been limited to affections of the respiratory organs, to phthisis, to asthma, and to catarrhal conditions of the air passages. It has, however, occurred to myself and to others that the injection of sedative gases and vapours by means of this apparatus may be destined to be of great service in other maladies, and especially in some painful uterine and intestinal affections.

Other agents besides sulphuretted hydrogen have been applied in the form of gaseous rectal injection with the aid of this apparatus. Iodoform in suspension in warm water has been placed in the "barboteur," and a mixture of its vapour with carbonic acid injected. It has been found of value especially in cases of fetid expectoration. Eucalyptol has also been used, but it has so far been found to be attended with so much bronchial irritation that its employment has not been persevered in. Terpinol has proved useful in phthisical and catarrhal cases with much fetid expectoration; the fetor of the breath has been agreeably modified.

This method is so new, and, so far as this country is concerned, so untried, that you will not expect me to express at present any very positive opinion as to its value, based on my own observations; but I will tell you what I have been able to gather from trustworthy observers. I will state to you Dr. Bergeon's own testimony, and put before you the results of our own observations so far as they have gone.

And, first, as to Dr. Bergeon's own testimony. He has stated that by this method phthisis, asthma, and chronic bronchitis can often be cured and nearly always alleviated. For more than two years he has been applying this method in cases of chronic diseases of the lungs and throat—more than two hundred in number—with an astonishing amount of success. In cases of early phthisis, he says, the disease is usually arrested in two or three weeks, and in a few months cured; and considerable amelioration is obtained in advanced incurable cases. It lowers the pulse, reduces temperature, checks the night sweats, restores appetite, diminishes greatly the amount of expectoration, and removes its purulent character, while the cough is greatly relieved. In advanced laryngeal phthisis he has observed rapid benefit when all other treatment has failed to give relief. Paroxysms of asthma are relieved more effectually than by any other means. Such is the testimony of the inventor of this method—testimony advanced not hastily, but as the result of two years of careful observation.

Dr. Chantemesse reports that he treated "nine patients in his wards presenting the general and local signs of pul-

[1] Those used in King's College Hospital were prepared by Messrs. Bell of Oxford-street.

monary tuberculosis with characteristic bacilli in their sputa, by Dr. Bergeon's method, and they obtained very great benefit. The increase of body weight was rapid—a pound and sometimes a kilogramme a week. Cough and expectoration were considerably diminished. The sputa, however, continued to present the characteristic bacilli of tubercle. They were under treatment for six weeks. One gained nine pounds in weight in that period." He also applied this treatment to two cases of very violent spasmodic asthma. He injected carbonic acid gas mixed with vapour of bisulphide of carbon. Half an hour after the first injection there was a very notable relief of the dyspnœa, and, the treatment being continued, the breathing became free and the paroxysms did not return during the whole course of the treatment. Commenting on the clinical observations of Dr. Chantemesse, Professor Cornil remarks: "So far we may say that rectal injections of carbonic acid and sulphuretted hydrogen gas constitute an excellent therapeutic method in phthisis as well as in asthma, and we ought to accept it all the more readily seeing how powerless are the therapeutic resources which we oppose to phthisis."

Dr. Morel,[2] alluding to the continued presence of the bacilli in the sputa of those restored to health by this method, suggests that their injurious influence is probably neutralised and their infectious properties destroyed by this mixture of gases; but he points out that unless this treatment be maintained in some degree, even in those restored to health, there can be no sense of security against a relapse so long as the characteristic bacillus appears in the expectorations.

In Geneva Dr. Bennet testifies he found several physicians adopting this method of treatment last September with "apparent benefit." He also states that in a case of very advanced phthisis under his own observation this treatment was "attended with an unhoped-for rally," and in a case of obstinate asthma he observed most remarkable alleviation.

Dr. Bardet, reporting the results of the observations at the Hôpital Cochin in Paris, says, "so far our results accord entirely with those announced by Dr. Bergeon. A rapid and constant sedative effect ensues, the cough diminishes rapidly, the patient sleeps much better, and the expectoration tends to disappear. These effects are very remarkable."[3] In Paris they were disposed to regard the carbonic acid itself as a valuable and important remedial agent.

As at present, we have only tried this method in this hospital for five or six weeks, and on a very limited scale, we have not been able to do more than corroborate some of the preceding statements. There is certainly no difficulty or danger in the operation, and we have not found it objectionable to the patients. We have observed a gain in flesh and strength, and an expression of general amelioration; the pulse, temperature, and respiration have fallen, and the expectoration has been diminished; rest at night has been improved. Beyond these statements of general improvement our data at present will not allow us to go. I have been much indebted to the co-operation of our excellent house-physician, Dr. Ewens, and particularly to my clinical clerk, Mr. Verdun, without whose valuable help it would have been impossible for me to have carried out a method of treatment requiring such constant personal supervision.

If bisulphide of carbon be the agent employed in Dr. Bardet's apparatus, it is necessary to empty the "barboteur" after each injection and wash it out with alcohol, and afterwards open the tap *r*, and by means of the elastic ball (P) drive air through the tubes so as to get rid of all the vapour of the bisulphide, otherwise it will rapidly make the apparatus unserviceable. I saw one case in Paris, a young girl in the cavity stage of phthisis, who had benefited much at first from this treatment, but subsequently it had to be discontinued on account of the difficulty she experienced in expectorating, so greatly was the expectoration diminished in quantity. Another patient also in advanced phthisis, in an adjacent ward, was clamouring for a renewal of the injections (which had been suspended) on account of the benefit he had received from them. No doubt the trouble attending this method of treatment will tend to render it unpopular with hospital attendants, and we must therefore be on our guard how we allow it to be discredited from interested motives. Dr. Bergeon maintains that when this method has failed it has failed because of a faulty or insufficient mode of application, and that if it is to be fairly tested it must be on the conditions he has laid down.

It must be admitted that new methods of treatment of phthisis are often submitted—and by those who should know better—to most improper and unsatisfactory tests. If the treatment we have been discussing, or any other treatment, were absolutely curative of phthisis, it could only be so under certain definable conditions. We may go further, and assert that if we possessed at this moment a certain cure for tuberculosis, it would of necessity leave a great proportion of existing cases of phthisis incurable. We should endeavour to realise this fact clearly, and to clearly comprehend what is the problem involved in the "cure of phthisis." To cure phthisis, we must begin to treat the disease before it has led to its most common result, the extensive destructive disintegration of lung tissue. No doubt local ulceration and loss of substance may occur, and cicatricial contraction and arrest of disease follow, when the surrounding lung tissue is sound; but this can only take place when the lung destruction is circumscribed and limited. Unfortunately, we too frequently have cases brought to us for treatment when all chance of curative treatment has passed away, and no matter what remedies we might have at our disposal, we could not work with them impossibilities. Yet we find experienced physicians testing "cures" of phthisis on advanced and hopeless cases of this kind, and reporting that the remedies are useless because they do not cure cases which are by no possibility curable. If the morbid changes which take place in the lungs in phthisis were actually open to our inspection, if we could see them instead of having them concealed from us, the idea of local medication of the lungs in the treatment of phthisis would, I feel sure, make rapid progress. The modification of the ulcerative, decomposing, and disintegrating changes, and tendencies to change, in phthisical lungs by antiseptic agents, which, in whatever form administered, have a local action, would appear to us imperative. Whether our antiseptic influences take the form of the pure aseptic air of the open sea, or of elevated mountain regions, or of pine forests, or of the inspiration of antiseptic vapours in well-ventilated apartments at home, or of antiseptic agents administered by rectal injection, or by hypodermic injection, which latter method is being largely employed in Paris at this moment, the principle is the same—viz., to exert an antiseptic and aseptic influence on the pulmonary or other affected tissues.

It is untrue to state, as some physicians have not hesitated to do, that the idea of antiseptic medication in phthisis has failed to be of much benefit. On the contrary, it has been productive of enormous benefit; and when the professional mind has overcome some of its prejudices and its narrowness of view and mode of thought, it is destined, I feel certain, to be of the greatest possible service. In connexion with this subject I was struck with the report by Dr. Neale in the *British Medical Journal* of Dec. 4th, 1886, of the excellent results he had obtained from what he called the "open-air treatment of phthisis." But what else had the patient besides a freely ventilated apartment? "Iodine is freely distributed about the apartment, and a pad of terebene placed under the chin when the patient is in bed. Food is pushed, cod-liver oil, with iodoform pills, and iron and belladonna, and oxide of zinc to control the night perspirations." I congratulate Dr. Neale on the signal success of his vigorous antiseptic medication. I could not wish a more thorough application of its principles: iodine vapour and terebene vapour to the respiratory passages; iodoform internally; fresh air always.

About the same time that Dr. Neale was pushing antiseptic treatment in the case he has reported, Mr. Pollard, of Queen Anne-street (in October last), brought a young gentleman to see me whom we both thought had but a very short time to live. He presented an aspect of marked cachexia, a temperature of 103° F. at midday, and rising even higher in the evening; physical signs of infiltration of the upper part of the left lung, with patches of dulness over both lungs behind, accompanied with blowing respiration and a pleuritic friction here and there. It is true the disease was of comparatively recent date, and there was no evidence of extensive destruction of lung tissue, but the fever was so considerable, the cachexia so marked, and the infiltration apparently so diffused, that we arrived at a very unfavourable prognosis. We declined to sanction his leaving home, and I pointed out to my friend Mr. Pollard that I considered the only chance of improvement, and that but a faint one,

[2] Nouveau Traitement des Affections des Voies Respiratoires par les Injections Rectales Gazeuses. Paris, Masson, 1886.

[3] Les Nouveaux Remèdes, November, 1886, p. 506.

rested in antiseptic medication. We gave him, internally, four minims of creasote in two teaspoonfuls of cod-liver oil three times a day, and prescribed the continuous inhalation of equal parts of terebene and eucalyptol. He had also a quinine and strychnine mixture as a general tonic, and some powders at night of bismuth and oxide of zinc to check the night sweats and tendency to diarrhœa. About three months afterwards I own I was somewhat surprised to see Mr. Pollard reappear with his young patient, and transformed. The results of this treatment had been most remarkable. Beyond the continued existence of the physical signs of some infiltration at the left apex, and some irregularity in the inspiratory expansion of the chest, as though from pleuritic adhesions, his condition was most satisfactory. He had gained much flesh; he had no fever, no night sweats, no dyspnœa, and not much cough. The cachectic appearances had vanished. I asked Mr. Pollard how he had contrived to obtain so striking a result. He replied that it was by a most thorough, painstaking, and conscientious adherence to all the details of the treatment we had agreed upon. When, gentlemen, we encounter such results as these from a method of antiseptic medication rigorously carried out, I think we are justified in saying, in the words of Dr. Leudet, "There is something in it."

Clinical Lectures
ON
DISEASES OF THE EYE.

Delivered at the Nottingham and Midland Eye Infirmary, December 9th, 1886,

BY C. BELL TAYLOR, M.D., F.R.C.S.,
SURGEON TO THE INFIRMARY.

LECTURE V.

EYE TROUBLES IN GENERAL PRACTICE.

GENTLEMEN,—I see no reason to doubt, and there is every reason to believe, that the operations you have just seen will end in the restoration of sight; and to restore sight to the blind has ever, and justly, been considered one of the grandest of human achievements. Brilliant and gratifying, however, as undoubtedly are the results of our most frequent ophthalmic operations, they are, after all, but as dust in the balance compared to the vast amount of human misery which is alleviated and the sum total of blindness which is prevented by the judicious treatment of the most common maladies to which our patients are subject, and which invariably in the early and most curable stages come under the notice of the general practitioner. Take, for instance, that most frequent of all the causes of blindness, the purulent ophthalmia of infants. There is no disease so easy to prevent, there are few diseases so easy to cure, and there is not one so fatal in its effects. If you will look over this work by Professor Corradi, entitled "La Cecité en Italie," you will find that there are upwards of 300,000 blind persons in Europe alone; and if you will glance at this graphic representation of the causes of blindness prepared by Dr. Magnus of Breslau, you will see at once that the purulent ophthalmia of infants stands at the head of the list; while if you will study, as I have done, the reports of the various blind asylums throughout Europe, you will find that from 30 to 46—ay, and 50 per cent.—of the inmates of these institutions owe their misfortunes to this terrible disease. Gentlemen, just consider what this means: it does not mean blindness coming on after a long life of usefulness or pleasure; it does not mean dimness of vision, admitting of more or less hopeful treatment; it does not mean damaged sight or blindness of one eye; it means blindness of both eyes—total, irreparable, coming on in the very earliest days of infancy, and lasting throughout the whole of many a long, weary, tedious, desolate life. Now this disease is not caused, as many have believed and taught (Stellwag), by cold, by a draught, or by sudden exposure to concentrated light. It is caused, as was first pointed out by our distinguished countryman Gibson, of Manchester, by the direct inoculation of the child's eyes with the secretions of the mother's vagina, and may be prevented as easy as easy can be by curing the leucorrhœa of pregnancy, by disinfecting or wiping away the discharge even so late as during the progress of labour, by insisting upon the most scrupulous cleanliness on the part of the attendants, so that their hands may not communicate infection, and by taking care that the child's face is not washed in the same water which is used for its bath, and that its eyes are not wiped with the same sponge that is used for its person. Gentlemen, if these precautions were thoroughly carried out in every case of midwifery, I venture to affirm that there would not be another case of bacterial purulent ophthalmia in the universe. Even if a little matter should have got into one or other of the child's eyes, it may be destroyed at once and *in situ*, before any harm is done, by a drop of a 2 per cent. solution of nitrate of silver;[1] and if one eye should unfortunately have become infected before you see the case—and, mind you, it is seldom that both eyes are struck at once[2]—the sound eye may be protected and sight assuredly preserved by the use of this little simple contrivance, this sticking-plaster shield, which I regard with parental, and I trust with pardonable, pride, since I am sure that I have saved many an eye by its use.[3] (Fig. 1.)

FIG. 1.

Gentlemen, I said the disease was easily cured, and so it is. Let me quote a little evidence on this point. Mr. (afterwards Sir William) Lawrence, late surgeon to St. Bartholomew's Hospital, whose work I have here—and I can cite no higher authority,—writing in 1833, says: "There is a singular contrast between the virulence of this inflammation of the eyes of newly born children, and the serious consequences to which that inflammation so rapidly leads, and the readiness with which it yields to suitable treatment; hence, if we see a case of purulent ophthalmia before any injury is done to the cornea, we may assure the parents, and it gives us great pleasure to be able to do so, that sight will not suffer. Even the most violent form is very manageable, and will do well when properly treated."[4]

Again, Professor Knapp of New York, another eminent ophthalmologist, whose archives I here commend to your notice, tells us, half a century later, that "no child need lose its eyes from ophthalmia neonati, and no child does if

[1] This is Credé's much-vaunted method: a solution of nitrate of silver, eight grains to the ounce, is dropped into each eye of every child born, "dans les services d'accouchement," and Dr. Kaltenbach, in a recent communication to the Congrès Allemand de Gynécologie declares that the cases of purulent ophthalmia have in consequence diminished from 15 per 100 to 0 per 100.—(See Recueil d'Ophthalmologie for August, 1886.)

[2] The ophthalmia almost always appears at first in one eye alone, the other being affected some days after. The transference of the secretion from one eye to the other seems to be the usual origin of the disease in the second eye.—(See Treatise on Diseases of the Eye, by Carl Stellwag, von Carrion Professor of Ophthalmology in the Imperial Royal University of Vienna, p. 317.)

[3] The shield is merely a piece of sticking-plaster with a hole in the centre, cut to correspond with the pupil; the aperture is filled by a piece of gauze. The baby depicted in the figure, whose left eye was attacked with a virulent form of purulent ophthalmia three days after birth, had its right eye protected in this way upwards of a fortnight.

[4] Lawrence on Diseases of the Eye, p. 171.

faithfully treated"; adding, "I speak from an experience, not of dozens, not of hundreds, but of thousands of cases."[5]

You will find a similar expression of opinion in this excellent *brochure* entitled "The Prevention of Ophthalmia Neonatorum and its Ravages," by Dr. David McKeown, of Manchester, presented to the Obstetrical Society of London in February last year; as also in this popular treatise entitled "Eyesight and how we lose it," by my distinguished *confrère*, Dr. Priestley Smith, of Birmingham. In short, gentlemen, not to detain you unnecessarily, I may say, without fear of contradiction, that on this point ophthalmic surgeons are agreed. The disease is easily cured. How is it, then, you will very naturally say, that so many children lose their sight from purulent ophthalmia? The reply to that question is simply this: either they are not properly treated or they are not treated in time. Let me prove this to you. Of 630 cases treated in an early stage of the disease by Professors Horner, Schweigger, and Hirschberg, 630—that is, every one—recovered with absolutely perfect sight. On the other hand, and I bid you mark the sequel, of 120 cases coming under the care of the same gentlemen, but not seen until a later stage, 49—that is, not quite one half, but more than a third—lost the sight of both eyes beyond all chance of recovery or possibility of improvement. Gentlemen, that is the trouble. The practitioner is called in when the parents are alarmed, or the specialist is consulted when the practitioner is alarmed, and then it is too often too late either to save the eye originally affected or to preserve the sound eye from inoculation. A few days ago—perhaps I ought to say nights, for it was after eleven o'clock—a cab dashed up to my door, the bell rang violently, and a lady with an infant in her arms was ushered into my consulting-room. "Dr. Bell Taylor," she exclaimed, bursting into tears, "will my baby see?" I ascertained that the child's right eye commenced to discharge three days after birth, some days later the left was inoculated from it, and both had been discharging freely for three weeks. All was supposed to be going on well. "The child was said to have a cold in its eyes," and, so far as I could learn, no special anxiety was felt as to the result, when suddenly it flashed upon the mother that her boy might lose his sight; and acting on the impulse of the moment, though late in the day, unfit to travel, and a hundred and fifty miles away, she rushed to the station and caught the train for Nottingham. I succeeded in arresting the discharge in a few days, but both eyes were lost from sloughing and ulceration of the cornea when she started on her journey. Gentlemen, this is a deplorable state of things; it ought not to be; and I can assure you that the various societies interested in the prevention of blindness look to you general practitioners who attend midwifery, and who have so much in your power, to save us from further reproach on the score of blindness from purulent ophthalmia. With regard to treatment, mycologists assure us that the virulence of the disease is due to the ravages of a gonococcus discovered by Neisser in 1879, which, like an elephant in a field of maize, battens on the cylindrical epithelium of the palpebral conjunctiva. It appears that the columnar epithelium of the bulbar portion of this membrane affords no nutriment to this microscopic specimen of the *ferae naturæ*; however that may be, it is an important clinical precept that our remedies must be sufficiently strong to disinfect the conjunctiva, and that they must be applied to the inside of the everted lids at least once in twenty-four hours. I have found chloride of zinc an excellent antiseptic myself; but the remedy *par excellence* is the nitrate of silver, which may be used in the form of mitigated stik, or 2 per cent. solution.[6] Meanwhile the matter must be worked out from underneath the lids, which must be prevented from sticking together by a little oxide of zinc and white precipitate ointment, and the eye must be kept saturated with alum-water or weak solution of chloride of zinc (one grain to the ounce), which may be iced or heated according to the nature of the case. If the lids are swollen, tense, red, and shining, they may be punctured, leeched, or painted with a solution of nitrate of silver in nitric ether; and if the cornea threatens to give way, the anterior chamber may be tapped and a compress bandage applied. You need not fear to separate the lids for the purpose of looking at the eye in the early stages of the disease, but later on the utmost care is needed. I was called to a case of this kind some time ago, a long way off; two surgeons were already in attendance, one a specialist. I said: "The cornea of the left eye is on the eve of perforation, and I think we had better give a little chloroform, tap the chamber, and apply a compress bandage." My ophthalmic friend dissented from this view, and proceeded to repeat my examination for himself. I was leaning over anxiously, I may say fearfully, watching the process, when, probably from some sudden motion of the child, the lens was projected with violence, and struck me in the right eye! By dint of free ablution and the use of antiseptics I was "quit for the fright," but it was a warning to me, and I am sure it will be a warning to you to be careful how you conduct an examination in the later stages of purulent ophthalmia. Apart from the danger to the child itself, the risk to attendants from carelessness in this respect is something greater than you can readily conceive. Let me endeavour to impress this upon you by a recital of two or three very important facts. 1. I have known a short-sighted nurse inoculated by pent-up matter, which spurted out when the adherent lids were suddenly separated. 2. Two friends of my own, surgeons, have each lost an eye from accidental infection. 3. It is a fact that 11·8 per cent. of the nurses in the St. Petersburg Hospital manage somehow or other to contract this disease from children under their care (Haussmann). 4. If you will refer to the reports of the foundling hospitals of Prague, of Vienna, of St. Petersburg, and the records of the Parisian *crèches*, you will find that a considerable proportion—from a fourth to a third (Fuchs)—of the baby inmates of these institutions contract this disease after admission, and may thus be said literally to be taken in and blinded at the public expense.[7] In order to avoid these deplorable accidents it is well that those who are much engaged in the treatment of these cases should wear large protective glasses. Sponges and syringes (the latter also because they are apt to injure the corneal epithelium) should be discarded, and all rags, linen, &c., which have been in contact with the discharge should be at once destroyed, for, as you will learn directly, it is dangerous to wash them.

Adults and others infected from children suffering from ophthalmia neonati present various degrees of purulent ophthalmia, according to the stage and virulence of the source of infection, and authors usually consider gonorrhœal ophthalmia under this head because it is marked by the presence of the same microbe and alike communicated by direct infection. There is no comparison, however, between the amount of reaction and destruction occasioned by inoculation with a mild fluor albus, such as most women suffer from some time or other during their lives, and that which follows the insertion of a particle of gonorrhœal matter into the conjunctival sac; indeed, in the latter case it is almost impossible to save the eye. Speaking on this point, Professor Arlt of Vienna says, "I have lost many eyes from gonorrhœal ophthalmia." Mark that, gentlemen. Professor Arlt is one of the most accomplished practitioners in Europe, and perhaps the most experienced; and if he, with all appliances and means to boot, cannot save the eye in the majority of these cases, it is clear that we have to do with a disease of exceptional virulence. Fortunately, however, in this affection only one eye is infected (unless when the patient has bathed his eyes with his own urine), and we can always guarantee the sight by protecting the sound eye with the shield to which I have already called your attention; and here let me beg of you to apply it on suspicion. This simple shade cannot, under any circumstances, do any harm; sight is not interfered with; ventilation is perfect; the patient is not prevented from helping himself or walking about; and its neglect is often attended with most disastrous consequences. Above all, let me beg of you not to believe the youths and young men, the most frequent subjects of this affection, when they tell you that they are free from venereal taint; for I have known even highly educated gentlemen deny the soft impeachment, when their shirts were stiff with discharge. We had a sad example of the results attending the neglect of the shield in the case of a poor woman from Grantham, who was here three months ago. Her right eye (it is generally the right eye) was inoculated from some

[5] Archives of Ophthalmology for March, 1882. Putnam's Sons, New York.

[6] If the remedies must be entrusted to the friends, the nurse may drop into the eye a solution of nitrate of silver, two or three grains to the ounce, thrice daily.

[7] At the meeting of the Imperial Surgical Society of Paris, on Feb. 21st, 1886, M. Giraldès (L'Union Méd., No. 823, et 26, 1886) reported that in the Hôpital des Enfants Trouvés the loss of eyes (sometimes even of life) by blennorrhœa neonatorum reached the enormous number of from 80 to 90 per cent.

linen she had to wash, and discharged freely for three weeks; at the end of that time, sad to relate, some of the matter got into the left eye, and when she came here both corneæ had sloughed. She was a widow, forty years of age, strong active, fond of work, and had two children dependent upon her. Of think of it!—hopelessly blind for life; and all for want of a bit of sticking plaster which any country druggist might have applied just as well as the most accomplished surgeon.

With regard to the treatment of gonorrhœal ophthalmia. "Dreadful diseases require dreadful remedies," and if you are to succeed you must be instant in their application. I usually apply leeches by the handful; pack the eye with ice, and, unless there is some contra-indication, keep it constantly applied; slit the outer canthus, incise and excise (if necessary) portions of the chemosed conjunctiva, and get the patient rapidly under the influence of mercury. During the crudescence of the disease, and when it is at its height—that is, during the first forty-eight hours, or while the discharge is serous,—strong caustics are out of place; but you may keep the eye saturated with weak solution of chloride of zinc (½ or ¼ per cent.)[a] from the beginning, and as soon as the serous discharge becomes purulent, apply as well once or twice daily to the inside of the everted lids a 2 to 4 per cent. solution of nitrate of silver, carefully protecting the eye by neutralisation with milk or saline solution. I have saved some eyes in this way, but occasionally the cornea will slough in twenty-four hours, and then all you can do for the patient, and that is everything, is to protect the sound eye from inoculation.

(To be concluded.)

THE GENESIS OF "BRIGHT'S DISEASE."

BY J. MILNER FOTHERGILL, M.D.,
PHYSICIAN TO THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA PARK.

THE prevalence of the morbid change so far best known by the term "Bright's disease" (from Richard Bright, who first wrote on the subject); its certain ending, sooner or later, in death; together with the fact that its course can be profoundly modified by proper and judicious measures: all combine to give the subject an intense interest for all—physician and patient alike. "Old age is not an entity, but a set of conditions predisposing to what we call chronic Bright's disease. And though to most this comes in natural course when the prime of life is run, yet to some old age is no matter of years and of averages, but the running down of a spring set for an individual." Such is the happy expression of Dr. Goodhart in his well-known Bradshawe Lecture before the Royal College of Physicians of London in August, 1885. It is a slow, gradual growth of the lowly connective tissue of the kidney at the expense of the higher kidney tissues. But the kidney-mischief is only a part of the morbid change. A like growth of lowly tissue is going on in the walls of the arteries—atheroma—rendering them inelastic and brittle. But what calls out the growth of the lowly connective tissue in kidney and artery? The irritation set up by the presence of uric acid (possibly accompanied by other forms of albumen-metamorphosis) in excess in the blood. In order to grasp the matter firmly we must look a little beyond mere clinical facts, so as to read these last aright. We see, in the gradual evolution of life, the reptile, the cold-blooded inhabitant of tropical swamps, casting out its excrementitious matter in solid form—i.e., urates. The uric acid formation still continues in the warm-blooded bird, which also possesses a solid urine. When the mammalia appear, they are found to have a fluid urine, and their form of excretion is the soluble urea. But vestiges of the earlier formation still cling with the tenacity of original sin; and a certain, if small, quantity of uric acid is daily voided by man himself. So that we still carry with us traces of our descent in other forms than the branchial arches—the gills of fœtal life. Indeed, the circulation of the fœtus is that of the higher reptile; and the uric acid formation is distinctly seen in intra-uterine existence. We have long been familiar with the fact that under given circumstances the human body reverts to the early primitive form of urine-stuff. As to gout, we have recognised its association with good eating, especially when accompanied by a lack of exercise. The sensuous monk of old, lazy, fond of good living, and addicted to wine-bibbing, was the typical gouty man. Now, it is the country squire, whose habits were active till gout in his feet cripples him, and then its fell clutch becomes tighter and harder; or the p'ethoric publican, whose pleasures are those of the palate. This was the gout which came of good living. "Gout is the disease of those who will have it," said Meade. But a number of cases of distinct gout were found under widely different circumstances. They occurred in spare beings, small fastidious feeders, whose trencher performances were conspicuous by their temperance. To this class the term "poor man's gout" was applied. It did not explain the apparent paradox, and this inability to explain it was regarded as an opprobrium to the medical profession. Doubtless a large proportion of the sufferers from poor man's gout were descendants of gouty ancestors; and only by the strictest regimen, as to meat and drink, could they elude the visitations of their hereditary foe. But the gouty ancestry was not present in all cases.

The late Dr. Budd held that sundry persons came into the world with what he called "insufficient" livers; and Dr. Murchison endorsed this view. Such livers revert to the uric acid formation very readily; and now poor man's gout stands revealed before us. Indulgence in animal food in excess reduced a normal liver to the uric acid formation. A congenitally insufficient liver reverts to the uric acid formation under an ordinary or even meagre dietary. The result is the same in each case. When the uric acid formation is established we find one of two consequences: either (1) the uric acid is gradually deposited in the body, in the articular cartilages by preference; or (2) is cast out by the kidneys, which, being constructed to excrete the soluble urea, are irritated by the presence of uric acid in excess; with the result of interstitial nephritis, or chronic Bright's disease. Often both are found.

Renal changes are by no means the sole morbid outcome of the uric acid formation. The cardio-vascular system feels its malign touch. A tight artery is the consequence of the blood condition, and, with that, changes in the arteries and the heart. The high blood pressure in the arterial system leads to hypertrophy of the left ventricle, and that, again, to secondary valvulitis of a progressive nature—probably due to the forcible closure of the valves; the mitral by the large ventricle; in the aortic by the recoil of the highly distended artery. Possibly in the latter there is a tendency to gouty deposits, as in the joints. The distension of the arteries leads to a growth of connective tissue in their walls, which lose their elasticity and become brittle—the atheromatous change,—and from these we get apoplexy and aneurysm; while angina pectoris vaso-motoria is called out by occasional spasm of the peripheral arterioles. Sooner or later the growth of connective tissue within the coronary arteries themselves cuts down the nutrition of the large heart, and fatty degeneration spreads throughout its structure. The failing heart leads, in its turn, to dropsy, albuminuria, and death. Indeed, we get a vast number of morbid outcomes in this widespread vaso-renal change, beyond the interstitial nephritis, which is spoken of as "chronic Bright's disease," or "renal cirrhosis," or "the gouty kidney," as it is variously termed. But the consideration here is restricted to what is truly "chronic Bright's disease," a renal change started by an impure blood, as Professor Hayles Walshe asserted in 1849.[1] The uric acid (and possibly other excrementitious matter of nitrogenised character, the products of albumen metamorphosis) irritates the kidney structures, and starts up a rank growth of the lowly connective tissue, or packing material, at the expense of the higher true structures of the kidney. Here and there in minute foci, scattered throughout its mass, mainly in the cortex at the outset, we find the destructive action at work. The lowly invader is preying upon the higher structures, like the Tartar Turk spread himself over the population of the Balkan peninsula, and

[a] I consider the constant application of these solutions of the utmost importance. Dr. Colles of Dublin, writing in the Dublin Quarterly, vol. xxxv. p. 5, declares that he has been singularly successful in cases of gonorrhœal ophthalmia with solution of nitrate of silver, one quarter of a grain to the ounce, injected every ten minutes for twenty-four hours, the strength being afterwards increased to half a grain to the ounce, and injected every half-hour.

[1] THE LANCET report: Bright's Disease not essentially a Renal Disease, but essentially and primarily a Blood Disease.

with the same result—destruction. Slowly and steadily one minute portion of the kidney after another is caught within the light touch of some soft growth of connective tissue; but as the latter dries up and hardens, it contracts, and the true tissue within its clutch is ruined—squeezed out of (functional) life and (anatomical) form. Bit by bit, and often very slowly, the process goes on, until the kidneys are rendered inadequate as depurative organs, and the blood is rendered toxic by being surcharged with waste of albuminoid origin. Then follow secondary inflammation set up by the toxic blood, or other truly uræmic complications, often desperate attempts on the part of the body to cleanse its blood. To call this widespread change a "kidney disease" is as much a misnomer as to apply "Pimlico" to the whole metropolitan area; and to seek for evidence of it in the renal secretion solely is as imperfect as would be an inquiry into the sanitary arrangement of Lambeth, however carefully conducted, as to the state of the whole area which discharges its sewage at Barking Creek. Casts of the renal tubules are truly the infallible evidence of renal destruction as to existence, if not as to extent. The character of the urine tells much: when it is copious and of low specific gravity we have only too good reason to decide that the injury is extensive and widespread. Sometimes albumen is present in the urine, but its significance depends upon its associations. Dr. Richard Bright found that when albuminuria coexisted with dropsy the kidneys were the seat of disease. But in the diagnosis of several practitioners the dropsy factor drops out of the calculation, and the diagnosis is made in its absence. Albuminuria and "chronic Bright's disease" are, however, not convertible terms by any means, nor the equivalent of each other, as is not unfrequently assumed.

Chronic interstitial nephritis is but one of the numerous morbid progeny of the uric acid formation, albeit an important unit. We are all familiar with this vaso-renal change, as it runs its course in the mesoblastic structures of the men of Norse type, large-boned and florid, giving joint-gout, cardio-vascular changes, chronic bronchitis, rheumatism, eczema, and secondary valvular disease in the large heart. That is one aspect of the vaso-renal change. But this is by no means the only aspect of this change. It may sometimes commence with primary kidney mischief, and consequent imperfect blood depuration. Far more frequently it starts from a congenitally "insufficient" liver. In persons of the neurosal diathesis or Arab type (to whom the term "neurotic" aptly applies), the phenomena are widely different. The mesoblastic tissues are comparatively untouched; while the hypoblastic and epiblastic tissues are the seat of suffering. These persons are of spare habit and complain of indigestion, acidity, and flatulence—matters of the hypoblast; of migraine, accompanied by vesical irritability, of palpitation, of failure of the heart's action, resembling syncope, except that they do not lose consciousness, and realise the horror of their condition—matters of the epiblast. In many cases cardio-vascular change is also present, and the migrainous neurotic is as liable to apoplexy as the red-faced, short-necked gouty man; the urine of the last is usually copious and clear, while in the neurotic the urine is often charged with lithates.

The migrainous neurotic of the uric acid formation is growing more and more common. Town populations have a tendency to grow smaller and darker, as anyone can see by comparing the living crowd with the worthies in effigy at Madame Tussaud's. They have a tendency to revert to an earlier and lowlier ethnic form, and are smaller in the bone. They are precocious, and the early development of the nervous system is accompanied by a deficiency or backwardness in the assimilative organs. There is an insufficient liver, which readily reverts to the uric acid formation; and this is aggravated by the fact that town dwellers eat more animal food than rustic populations of the wage class, while the latter have the advantage of plenty of oxygen. The town dweller works in ill-ventilated rooms, and his amusements are in-door in a vitiated atmosphere. With an insufficient liver, a meat dietary, and insufficient oxidation, the town dweller is the subject, more than all others, of the uric acid formation, with all its varied consequences. At Victoria-park Hospital I have under care at the present time a mite of a girl, not yet thirteen years of age, in whom all the phenomena of the migrainous neurotic are already present. The effect of town life is to produce a distinct retrogression to a smaller, darker, precocious race of less potentialities than the rustic population. Precocity is seen in early puberty, but reproduction is impaired; and Hayles Walshe, Mr. Cantlie, and others have shown that it is well-nigh impossible to find a true Cockney of the fourth generation. Dr. Ralfe informs me that of 800 inquiries made at the London Hospital only four resulted in genuine Cockneys of the fourth generation. The retrocedent race perishes either by sterility in the females, or their sparse progeny succumb to the diseases of childhood. These urban dwellers, the progeny of town-born parents, this retrocedent race, are the possessors of congenitally insufficient livers, and as a consequence are the victims of the uric acid formation. This liver reversion is the microcosm within the macrocosm. And Bright's disease is especially the disease of this urban race. Teetotalism and vegetarianism are no matters of mere caprice or fashion; but are the unconscious submission to an unseen law ruling the choice. The urban dwellers cannot tolerate the beef and ale of their rural forefathers. No doubt in many cases alcohol and syphilis play their part, and too often an important part. But these are only accessories to the great fact that the descendants of town dwellers die prematurely old of Bright's disease, and that the spring runs down at a much earlier period with them than with rural populations.

Many persons are remarking how common gout is becoming amidst us at the present time. Such is certainly my personal experience; though articular gout is by no means the common outcome of the uric acid formation in town dwellers. Sufferers from articular gout are comparatively infrequent among the crowd of persons who are undergoing that vaso-renal change to which "chronic Bright's disease" is the term most commonly applied. In other cases neurotics are found with the uric acid formation, who seem to owe their "insufficient" liver to hard intellectual toil on the part of their fathers. Nearly every American lady of this class has given me a history of the long and usually successful efforts of her father. "The fathers have eaten sour grapes, and the children's teeth are set on edge." There seems some law of antagonism betwixt the tissues of the epiblast and those of the hypoblast. Long sustained demand upon the brain as "the organ of mind" tells upon the viscera. The liver suffers therefrom; and the progeny of the hard-working brain-toiler comes into this world with an insufficient liver. Clifford Allbutt, F.R.S., some years ago pointed out clearly the mental causes of Bright's disease, in an address which attracted much attention at the time and since. Not only does my experience fall in with his as to the individual, but it seems to teach a further lesson—viz., that hard, sustained brain toil has its Nemesis in an insufficient liver, which reverts to the uric acid formation. The bright, high-souled migrainous-neurotic, one of the most charming patients who enter the physician's consulting-room, owes her fortune and her liver alike to her father's toil, which is rather a hard nut to crack for those whose ambition it is to make a fortune.[2]

Thus we see there are many factors—and some of them little suspected—at work in the genesis of Bright's disease. Nor is it inaccurate to say that it is a disease becoming daily more common in "this madly striving age." More familiarity with its causal relations ought to develop definite preventive measures.

Henrietta-street, W.

CASE OF

EXCISION OF TUMOUR OF CEREBELLUM.

By BENNETT MAY, F.R.C.S.,

SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

EARLY in August, 1886, my colleague, Dr. Suckling, informed me that he had a patient under his care in the hospital in whom he diagnosed a tumour of the cerebellum, which he thought might be amenable to operative treatment. Such a case did not at the outset offer to my mind much prospect of successful completion, on account of what I conceived to be the exceptional difficulty of access to a tumour in this portion of the brain. The actual procedure, however, I found to be extremely easy of accomplishment and of no great severity, and I believe that in some respects this

[2] No wonder Bright's disease is so prevalent among the hard-working inhabitants of the United States of America.

portion of the brain will be found not unfavourably placed for operative procedures. At any rate I wish to make this contribution as a practical inquiry in the study of a subject which is now engrossing so much professional attention. Although this case so quickly terminated fatally, there is no doubt whatever that this was owing to the valuable time which had been lost before the operation was performed, during which the child's vital powers became too greatly reduced to afford much hope of success. In all details of method I closely followed the lines laid down by Mr. Victor Horsley for the preparation of the patient and the treatment of the wound, &c. These appear to me to embody several points of considerable practical importance in brain surgery. In the case of another patient of Dr. Suckling's, whom I have just operated upon for epilepsy, complete primary union, without the slightest departure from normal health, has followed an extensive opening of the dura mater and exploration of the brain, and such favourable result appears to be almost the rule now. The following history and symptoms of the case are furnished by Dr. Suckling, who localised the position of the tumour with such accuracy that I was able to cut directly upon it at the spot he indicated.

"C. H——, a boy aged seven, was admitted into the Queen's Hospital on July 19th, 1886. The only important feature in the family history was that the father's uncle had phthisis. Twelve months previously to his admission the boy had rheumatic fever. In April, 1886, he suffered from severe and persistent headache, chiefly frontal, with vomiting. Since this time his sight had gradually failed. On admission, the pupils were dilated and unequal, but responded to light and accommodation. There was conjugate deviation of the eyes to the left, and paralysis of the external rectus muscle on the right side. There was intense neuro-retinitis on both sides, and the boy was nearly blind. The gait was staggering, the stagger being chiefly in the backward direction, but occasionally to the left side also. The mind was clear, the boy talking rationally and complaining that he could not see. The lungs were healthy. While in the hospital the boy vomited at times, complained of frontal headache, and gradually got worse, very soon being quite unable to stand. On August 20th marked retraction of the head was observed. On October 8th the boy was absolutely blind, and there was well-marked nystagmus. The knee-jerk was lost on the right side, and there was marked emaciation. The symptoms above recorded clearly pointed to a tumour in the cerebellum. The paralysis of the right external rectus led me to conclude that the tumour was in the right lobe of the cerebellum, and was growing downwards and forwards and compressing the right sixth nerve. It was thought also that it was most probable that the tumour was tubercular."

Owing to my absence from home in the autumn a regrettable delay of some weeks took place before the child was operated upon, and during this time his condition greatly changed for the worse, and he had become much collapsed in the few days preceding the operation.

Operation.—Full antiseptic precautions having been taken and the patient brought under chloroform, my first step was to expose that portion of the occipital bone which lies below the superior curved line, so that all proceedings could be carried on beneath the tentorium cerebelli. A curved incision with convexity upwards, and reaching a little above the external occipital protuberance, was carried across the back of the head from one mastoid process to the other. The scalp and subjacent parts were then carried down as a flap by separating all the muscular attachments from the bone, but more on the affected side (the right) than the other, until the neighbourhood of the foramen magnum was reached. The bone being well cleared and exposed, the trephine was applied about the centre of a quadrilateral space bounded above by the right superior curved line, below by the foramen magnum, and inwardly by the occipital crest, and the hole in the bone was freely enlarged by the bone forceps until a large quadrilateral space of dura mater was exposed. This was easily done owing to the thinness of the bone. Extreme bulging of the dura mater gave evidence of great intra-cranial pressure, and the membrane was then opened and turned up by incisions along three sides of the aperture in the bone. The cortex of the cerebellum appeared quite healthy, but at one spot, a little outside the centre of the exposed space, palpation gave an ill-defined feeling of hardness beneath the surface. I then incised the brain substance over this spot with a tenotome, and on entering the finger could detect the hard mass of a tumour nearly an inch below the surface. Having verified its tubercular nature by detaching a piece, I had no difficulty in digging it clean out of its bed by the handle of a small teaspoon. It was larger than a pigeon's egg, hard and horny on the exterior, and caseating in the centre. Hæmorrhage was trifling, and the child gave no evidence of any injury or disturbance to the brain. The dura mater flap was then fastened down and the outer wound closed, this flap affording an excellent protection and covering. Unfortunately the child's condition had sunk too low beforehand to permit of sufficient reaction, and he gradually sank and died of shock a few hours afterwards. No post-mortem examination was permitted, so I am unable to say whether any other tumour was present.

Birmingham.

TREES FROM A SANITARY ASPECT.

By CHARLES ROBERTS, F.R.C.S., &c.

As this is the usual time of the year for planting, pruning, and removing forest trees and shrubs, it is a fit time for considering the influence which trees exert on the sanitary surroundings of dwelling-places. The recent Parliamentary Report on Forestry shows that trees are now of little commercial value in this country; and we may conclude, therefore, that they are chiefly grown for picturesque effect, and for the shelter from the sun and winds which they afford. The relation of forests to rainfall has been studied by meteorologists, but little attention has been given by medical climatologists to the share which trees take in determining local variations of climate and the sanitary condition of dwellings, notwithstanding they play as important a part as differences of soil, of which so much is said and written nowadays. This remark does not apply to large towns, where trees grow with difficulty and are comparatively few in number, and where they afford a grateful relief to the eye, shade from the sun, and to a very slight extent temper the too dry atmosphere, but to suburban and country districts, where it is the custom to bury houses in masses of foliage—a condition of things which is deemed the chief attraction, and often a necessary accompaniment, of country life.

Trees of all kinds exercise a cooling and moistening influence on the atmosphere and soil in which they grow. The extent of these conditions depends on the number of trees and whether they stand alone, in belts, or in forests; on their size, whether tall trees with branchless stems or thickets of underwood; on their species, whether deciduous or evergreen; and on the season of the year. The cooling of the air and soil is due to the evaporation of water by the leaves, which is chiefly drawn from the subsoil—not the surface—by the roots, and to the exclusion of the sun's rays from the ground, trees themselves being little susceptible of receiving and radiating heat. The moisture of the atmosphere and ground about trees is due to the collection by the leaves and branches of a considerable portion of the rainfall, the condensation of aqueous vapour by the leaves, and the obstruction offered by the foliage to evaporation from the ground beneath the trees. The experiments of M. Fautrat show that the leafage of leaf-bearing trees intercepts one-third, and that of pine trees the half of the rainfall, which is afterwards returned to the atmosphere by evaporation. On the other hand, these same leaves and branches restrain the evaporation of the water which reaches the ground, and that evaporation is nearly four times less under a mass of foliage in a forest, and two and one-third times under a mass of pines than in the open. Moreover, trees prevent the circulation of the air by lateral wind currents and produce stagnation. Hence, as Mr. E. J. Symons has truly observed, "a lovely spot embowered in trees and embraced by hills is usually characterised by a damp, misty, cold, and stagnant atmosphere," a condition of climate which is obviously unfavourable to good health and especially favourable to the development of consumption and rheumatism, our two most prevalent diseases.

Now, if we examine the surroundings of many of our suburban villas and country houses of the better sort, we shall find them embowered in trees, and subject to all the insanitary climatic conditions just mentioned. The custom almost everywhere prevails of blocking out of view other houses, roads, &c., by belts of trees, often planted on raised

mounds of earth, and surrounded by high close walls or palings, from a foolish ambition of seeming to live "quite in the country." This is a most unwise proceeding from a sanitary point of view, and should be protested against as strongly by medical men as defective drainage and bad water-supply. Many houses stand under the very drip and shadow of trees, and "the grounds" of others are enclosed by dense belts of trees and shrubs, which convert them into veritable reservoirs of damp, stagnant air, often loaded with the effluvia of decaying leaves and other garden refuse, a condition of atmosphere very injurious to health, and answerable for much of the neuralgias of a malarious kind, of which we have heard so much lately. A very slight belt of trees suffices to obstruct the lateral circulation of the air, and if the sun be also excluded the natural upward currents are also prevented. As far back as 1695 Lancisi recognised the influence of slight belts of trees in preventing the spread of malaria in Rome, and the cold, damp, stagnant air of spaces enclosed by trees is easily demonstrated by the wet and dry bulb thermometer, or even by the ordinary sensations of the body. A dry garden, on gravel, of three acres in extent in Surrey, surrounded by trees, is generally three or four degrees colder than the open common beyond the trees; and a large pond in a pine wood twenty miles from London afforded skating for ninety consecutive days in the winter of 1885-6, while during the greater part of the time the lakes in the London parks were free from ice.

The speculative builder has more sins to answer for than the faulty construction of houses. He generally begins his operations by cutting down all the fine old trees which occupy the ground, and which from their size and isolation are more beautiful than young ones and are little likely to be injurious to health, and ends them by raising mounds and sticking into them dense belts of quick-growing trees like poplars to hide as speedily as possible the desolation of bricks and mortar he has created. It is this senseless outdoor work of the builder and his nurseryman which stands most in need of revision from time to time in suburban residences, but which rarely receives it from a silly notion, amounting to tree worship, which prohibits the cutting down of trees, no matter how injudicious may have been the planting of them in the first instance from a sanitary or picturesque point of view.

The following hints for planting and removing trees may be useful to those persons who have given little attention to the subject. A tree should not stand so near a house that, if it were to fall, it would fall on the house; or in other words, the root should be as far from the house as the height of the tree. Belts of trees may be planted on the north and east aspects of houses, but on the east side the trees should not be so near, nor so high, as to keep the morning sun from the bedroom windows in the shorter days of the year. On the south and west aspects of houses isolated trees only should be permitted, so that there may be free access of the sunshine and the west winds to the house and grounds. High walls and palings on these aspects are also objectionable, and should be replaced by fences, or better still open palings, especially about houses which are occupied during the fall of the leaf, and in the winter. Trees for planting near houses should be chosen in the following order:—Conifers, birch, acacia, beech, oak, elm lime, and poplar. Pine trees are the best of all trees for this purpose, as they collect the greatest amount of rainfall and permit the freest evaporation from the ground, while their branchless stems offer the least resistance to the lateral circulation of the air. Acacias, oaks, and birches are late to burst into leaf, and therefore allow the ground to be warmed by the sun's rays in the early spring. The elm, lime, and chestnut are the least desirable kinds of trees to plant near houses, although they are the most common. They come into leaf early and cast their leaves early, so that they exclude the spring sun and do not afford much shade in the hot autumn months, when it is most required. The lime and the elm are, however, beautiful trees, and will doubtless on this account often be tolerated nearer houses than is desirable from a purely sanitary point of view.

Trees are often useful guides to the selection of residences. Numerous trees with rich foliage and a rank undergrowth of ferns or moss indicate a damp, stagnant atmosphere; while abundance of flowers and fruit imply a dry sunny climate. Children will be healthiest where most flowers grow, and old people will live longest where our common fruits ripen best, as these conditions of vegetation indicate a climate which is least favourable to bronchitis and rheumatism. Pines and their companions, the birches, indicate a dry, rocky, sandy or gravel soil; beeches, a dryish, chalky, or gravel soil; elms and limes, a rich and somewhat damp soil; oaks and ashes, a heavy clay soil; and poplars and willows, a low, damp, or marshy soil. Many of these trees are found growing together, and it is only when one species predominates in number and vigour that it is truly characteristic of the soil and that portion of the atmosphere in connexion with it.

Curzon-street, Mayfair, W.

A CASE OF TRANSFUSION.

BY WARRINGTON HAWARD, F.R.C.S. ENG.,
SURGEON TO ST. GEORGE'S HOSPITAL.

As the operation of transfusion is not a very common one, and as there are several methods of performing it, it may be worth while to relate an instance in which the method recently introduced by Mr. Annandale was used with good effect.

A boy, fourteen years of age, who had been in St. George's Hospital under my care for two months, with periostitis of the femur and chronic pyæmia, had suddenly a profuse hæmorrhage into the cavity of a large deeply seated periosteal abscess of the thigh. The abscess had been opened and a drainage-tube passed through it a week before. When seen by the house-surgeon the boy was very much blanched, and had lost a large quantity of blood. The hæmorrhage was controlled by plugging the cavity and bandaging the limb. The following day some more bleeding occurred, in spite of the bandaging, and when I saw him blood was oozing freely through the dressings, and the boy was in a state of collapse. The abscess cavity extended round a great part of the femur, and from the inner side of the thigh a little above the knee to the outer side near the great trochanter. It was therefore too large and deeply seated to lay open, and the boy's condition seemed to forbid the possibility of surviving an amputation. I therefore only enlarged the lower opening sufficiently to give access to the fingers, and then firmly packed the entire cavity with carbolised gauze, placed a pad over the femoral artery, and bandaged the limb firmly from the toe to the groin. But when this was done the boy seemed to be sinking. It was therefore decided to transfuse into him some of his father's blood. This I did, with the assistance of Mr. Dent, in accordance with Mr. Annandale's directions. A vein at the bend of the boy's elbow having been exposed by a short incision over it, a double catgut ligature was passed beneath it, and the loop of the ligature divided. The lower or distal ligature was then tied round the vein. The vein was next opened, and a glass tube or nozzle, having one end bevelled, and the other attached to a short piece of indiarubber tube, was inserted into the vein. The upper or proximal ligature was now tied in a single knot round the vein and nozzle. In the meantime, the boy's father was bled from the arm into a glass measure containing a freshly prepared solution consisting of forty-eight grains of phosphate of soda in two ounces of distilled water—i.e., a solution of the strength of 1 in 20. Six ounces of blood were received into the vessel, so that the mixture consisted of three parts blood to one part of the saline solution. This was constantly stirred with a glass rod and kept at a temperature of about 100° F. by surrounding it with hot water. A three-ounce glass syringe, previously washed out with the soda solution, was now filled with the mixture of blood and solution, and its nozzle being inserted into the indiarubber tube connected with the cannula in the vein, its contents were slowly injected. Nearly three syringefuls were thus injected (eight ounces of the mixture). The cannula was then withdrawn from the vein, the ligature tightened and secured, and the skin wound stitched together with catgut. The syringe while being used was kept surrounded by hot flannels, and all the apparatus was washed in distilled water before commencing the operation.

The effect was striking and immediate. The pulse, which before the transfusion was imperceptible, could again be felt in the temporal artery; the boy regained consciousness, and was able to speak and swallow; and from this time he steadily improved. The transfusion took place on February 10th, and during the two months which have since elapsed he has had no more hæmorrhage.

The operation is an extremely simple one, and seems to me

to have the great advantage over any of the other methods which I have seen or practised of being free from the difficulties and dangers due to the formation of coagula. Even the simplest apparatus is apt to become clogged if unmixed blood is passed through it, and I can say from experience of it that the complicated instrument of Dr. Roussel is not an exception. On the other hand, the mixture of the phosphate of soda solution with the blood, while it prevents its coagulation, seems to have no attendant disadvantage. The apparatus used is simple and portable, does not easily get out of order, and requires no special skill for its management. This method has on three other occasions lately been practised by Mr. Dewsnap, house-surgeon at St. George's: in one case with complete success—the patient, who was in a state of collapse and insensibility from hæmorrhage, was revived by the transfusion, and is now well; in a second with temporary improvement; while in a third the patient was too seriously injured to recover.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

AN AFFECTION OF THE NERVOUS SYSTEM DURING THE EXANTHEM STAGE OF MEASLES.

BY T. COLCOTT FOX, M.B. LOND., M.R.C.P.,
PHYSICIAN FOR DISEASES OF THE SKIN TO THE WESTMINSTER HOSPITAL, AND PHYSICIAN FOR OUT-PATIENTS TO THE VICTORIA HOSPITAL FOR CHILDREN.

THE perusal of Dr. Thomas Barlow's interesting paper on a case of Early disseminated Myelitis occurring in the Exanthem Stage of Measles, and the discussion thereon in the Proceedings of the Royal Medical and Chirurgical Society, has reminded me of a curious case of an affection of the nervous system, which came under my observation in 1884. Notwithstanding the very imperfect nature of the notes, I am induced to send them for publication in the belief that they will prove of some interest at the present time.

Milly G——, aged four years and a half, was carried into the out-patient room at the Victoria Hospital for Children on Oct. 13th, 1884, unable to walk or stand. She was fairly well nourished, of good physique, and had been a healthy girl until her present illness. She could move her limbs—for example, reach out the arms to take proffered things and bend the legs,—but the muscular effort was accompanied by a singular and marked incoördination, the limbs being slowly waved about until brought to rest again, when they remained quite quiet. There was considerable loss of muscular power, the left leg being stronger than the right. The grasp was manifestly deficient. The muscles were rather flabby, but not specially wasted. The child was noted to have a somewhat vacant look, but could see well; the pupils were equal and responsive to light; there was absence of face and tongue paralysis. The speech, however, was markedly affected, for, although words could be articulated, they were only formed slowly and by a distinct effort. The child's intellect seemed good. The tendon and superficial reflexes appeared to be normal, and there was neither ankle clonus nor anæsthesia.

The history I obtained from the mother was as follows:—Two months previously—i.e., in August—the child, who up till then had enjoyed good health, was attacked with measles. The mother described the rash and accompanying bronchitis and absence of sore-throat, and was convinced that the affection was measles. A little brother and two other children in the house were also attacked. As the eruption faded away at the end of about a week, a "vacancy of mind" supervened, the girl became "cross-eyed," and could not sit up or move her limbs. She did not sleep, looked wild, would not endure people in the room, and became very "spiteful," so that they could not feed her from glass vessels. She could speak, put her tongue out, and swallow without nasal regurgitation. Her appetite was enormous. The child was believed to be blind, and Dr. Edwards, of Chelsea, who saw the case in the course of a very busy practice, kindly tells me that he remembers observing a state of dilatation of the pupils with an absence of reaction to light, and hearing complaints of twitching of the limbs. She gradually improved, and fourteen days previously to coming to the hospital she was able to sit up. I admitted her to the wards, and take the following additional notes from the report of Mr. Shaw-Mackenzie, the registrar: There was no retention of urine. The movements of the head were incoördinate, and accompanied by a peculiar slow nodding in different directions and rolling of the head. Nystagmus was observed at times. The ophthalmoscope did not reveal any diseased condition. The deltoid, triceps, and biceps muscles on both sides were believed to be somewhat wasted, but the electrical reactions of the muscles generally seemed normal. The child remained in the hospital for some months and very slowly improved, being able to stand by herself for a moment or two on January 5th, 1885, and she was discharged, almost entirely recovered, on March 8th. Throughout her stay the temperature was normal. As the family have changed their residence I have not been able to trace the case further.

To this account I append some observations on James Henry G——, aged one year, the little brother who was attacked with measles at the same time as his sister. On November 13th, 1884, he was brought to me with pneumonia and pain in the left wrist. Up to that date there do not appear to have been any special nervous symptoms. I did not see the child again, but I give the mother's description of the subsequent course of the illness for what it is worth. The pain gradually extended up the left arm, accompanied by stiffness and "shaking," and the left leg became similarly affected. The limbs shook more than his sister's. The tongue was drawn to the left and quivered, the face was drawn, and one eye was turned right into the nose. On the 16th the child was seized with strong convulsions, in which both sides of the body worked, and which recurred every quarter or half hour all day and also on the 17th till 5 P.M., when the infant became "quite sensible," and he died at 1 A.M. on the 18th. The left foot was shaking till the last.

A CASE OF TUBERCULAR DISEASE OF THE TIBIA AND ANKLE-JOINT (RIGHT), TREATED BY SCRAPING AWAY THE MEDULLA OF THE FORMER, AND THE SYNOVIAL MEMBRANE OF THE LATTER.

BY E. HURRY FENWICK, F.R.C.S.,
ASSISTANT-SURGEON TO THE LONDON HOSPITAL, SURGEON AND PATHOLOGIST TO ST. PETER'S HOSPITAL.

CASES in which the medulla of bones have been thoroughly scraped away are few. Those recorded are to be found chiefly in foreign literature, the operation having been performed for chronic osteomyelitis (Bleckmann, Stoll, Petrowski, C. B. Keetley). The following case seems worthy of publication, not only for the novelty and success of the above-mentioned proceeding, which it exemplifies, but also because there was combined with that procedure a new operation of Volkmann's (Halle) for treating tubercular joints. This latter operation is called by him *Arthrectomia Synovialis*, and consists in the total extirpation of the diseased capsule of a joint, with preservation of the bony epiphyses. The ankle-joint in this case was submitted to a modification of this process, with complete success.

A little girl aged two, of typical strumous aspect and build, came under my care at the London Hospital in August, 1885. When I first saw her the right leg was noted as follows:—"The lower half of the right leg is swollen and inflamed; extremely tender. An inch above the internal malleolus there is the opening of a deep sinus, with large flabby granulations bordering it. Probing reveals caries. The ankle-joint is swollen and tender; its movements are restricted; the appearance of the joint is that of tumor-albus, with a tendency to suppurate."

The history of this case was as follows:—The child springs from healthy stock; is the first and only child of moderately well-to-do people of the lower middle class; has always been well fed. Ten months ago, without any assignable cause, the leg began to be swollen and painful, and the little patient lost flesh. She was taken to a children's hospital six months ago, and an incision was made over the lower end of the tibia. The wound never closed. She was an in-patient three months. The diagnosis was easily made as being disease of the lower end of the tibia, probably tubercular, with subsequent invasion of the ankle-joint.

Resection of ankle, with amputation if necessary, was proposed to and accepted by the parents. An incision was made over the sinus and the spongy periosteum raised from the bone; the sinus was then seen as a rounded hole leading into the end of the tibia; cutting forceps rapidly enlarged the aperture, and a small central necrosis surrounded by a dense caseous material was found in the end of the bone and removed. Incision was then prolonged along the inner side of the foot. The ankle-joint was dislocated outwards, cleaned, and examined. The cartilage of the tibial articulation lay loose in the cavity of the joint like a thin piece of orange-peel, and the astragalus itself was bare. The synovial membrane was everywhere transformed into the spongy, pink, gelatinous material characteristic of a tubercular joint. With a Volkmann's spoon, and here and there with a scalpel and forceps, this diseased structure was carefully removed. Finding the joint so distinctly tubercular, I re-examined the tibial wound and found more caseous material present in the medullary canal. I took a long-handled Volkmann's spoon and scraped away as much of the medulla up to the tibial tubercle as I could remove. The inside of the bone was then plugged with strips of iodoform gauze, and the foot brought into a rectangular position and there fixed by means of an appropriate splint. The wound was dressed with iodoform and wood-wool. The result exceeded my expectations: the medullary canal filled up with rapidity, the wound into the ankle-joint healed in two months, and the child was discharged with a gum-and-chalk casing. She is at the present time in apparently good health. She limps slightly, but this is due to a shortening which exists, the left leg having grown slightly longer than the right. The right tibia is thicker than the left one, and, curiously enough, there is some movement in the right ankle-joint, such as obtains in fibrous ankylosis. She wears an iron on that leg, to limit if possible the tendency to knock-knee on that side—a condition obviously induced by the difference in the length of the legs.

This case is a teaching one as regards the tolerance of the medulla. One is so taught to regard it as being highly resentful of interference that it has hitherto been treated with marked respect. The cases, however, in which the medulla has been scraped show that good results have been obtained; and there is no doubt that much conservative surgery will be the direct outcome of the knowledge now accumulating as to its physiological uses, pathological tendencies, and the amount of operative interference it will submit to.

A CASE OF PURPURA RHEUMATICA.

BY G. CHILDS MACDONALD, M.D.

THE following case has recently occurred in my practice.

J. B——, aged twenty-nine, a blacksmith, married. Personal history satisfactory; does not remember ever having been ill, excepting cold, &c. Both father and mother alive and in good health; four sisters alive and healthy; one brother dead. The patient does not know the cause of his illness, but believes it to be due to some childhood complaint. He had not been feeling well for the last week, having suffered from headache and sharp shooting pains in the back and down the legs; he describes them as rheumatic in nature, so much so that his friends were afraid he was going to have an attack of acute rheumatism. Accompanying these pains was a sensation of cold, amounting occasionally to actual shivers; during this period he was extremely thirsty. The bowels were constipated, and sleep was restless and broken. No beer or spirits had been taken, excepting a small amount of brandy when the shivers came on; neither did he have any drugs or particular article of food. At 12.30 P.M. on March 4th he was taken with violent pain and stiffness in both popliteal regions, which became so agonising that he was unable to remain longer at work, and returned home, where, feeling very cold, he sat by the fire, the pain varying in amount, being sometimes better and sometimes worse, until 8 P.M., when he determined on going to bed; he had difficulty in getting upstairs, the legs feeling stiff and heavy. While sitting on the edge of the bed previously to removing his trousers, the whole of the pain went as if by magic. On looking at his legs, he was frightened to observe that they had become blood-red, and being naturally alarmed he immediately sought medical assistance. The patient is a well-developed man. Height 5 ft. 8 in.; weight 10 st. 10 lb. Skin somewhat pallid, but feels soft and moist. Pulse 82, quick, full, and hard; temperature beneath tongue 101°; tongue moist and clean. On the back of both thighs, extending from the gluteal folds downwards over the calves of the legs to about the middle, running to the inner surface of the thighs to the middle line in front, and on the legs to the crista of the tibiæ, is a red rash, most intense over the popliteal spaces, where it is uniform and somewhat raised; the rash on the inner surface of the thighs is similar in character; towards the periphery and in other places it is almost petechial. The whole of the involved areas of skin feel to the hand hot and dry; firm pressure has no effect on the colour, and it is unaccompanied by itching. The digestive, circulatory, respiratory, and genito-urinary systems are normal. Urine clear amber colour; reaction acid; specific gravity 1020; no albumen; no sugar. The patient was ordered a saline mixture, with three-minim doses of tincture of aconite in each dose, a ten-grain pill of colocynth with calomel at bedtime, and a milk diet.—March 5th: Has much improved; bowels relieved three times. Pulse 72; temperature 98·4°. There is no further extension of rash, which has become duskier in hue; no pain. Ordered a mixture of dilute sulphuric acid, tincture of perchloride of iron, and sulphate of quinine three times a day.—7th: Patient feels quite well. The eruption has entirely disappeared. Ordered to continue mixture for three days. Ordinary diet.

The points of interest in this case are the violence of the pain, its rheumatic nature, its sudden cessation, its complete symmetrical arrangement, and the rapid recovery, which is usually prolonged in these cases. Dr. Kinnicutt of New York has recorded similar cases in the *Archives of Dermatology*, vol. i., as has also Dr. Duhring in the *Philadelphia Medical Times*, 1873.

Duchess-st., Cavendish-sq., W.

CASE OF RHINOLITH.[1]

BY E. CRESSWELL BABER.

N. B——, aged twelve, was admitted a patient at the Throat and Ear Dispensary on Dec. 16th, 1886. She had had an offensive discharge from the left nostril for six years, with bleeding. There was no known cause. Neither she nor her mother remembered anything being put into the nose; but when young she had a habit of swallowing cherry-stones. There is epiphora on the left side when she is exposed to the wind. On examination, the left side of the nose and the left cheek were bulged out; the left nasal passage was impervious to air, the nostril on that side being contracted and its edges excoriated. Anterior rhinoscopy showed, on the right, considerable deflection of the septum towards that side; on the left, the anterior naris blocked by large soft granulations. Behind these, and completely hidden from sight, the probe revealed a hard body about an inch and a half distant from the tip of the nose. On Dec. 18th, with the assistance of my colleague Mr. Treves, the patient being under chloroform, this body was removed through the nostril with scoop and forceps. Afterwards no roughness could be detected with a probe, and the instrument passed easily through into the naso-pharynx. Subsequent examination showed that the left nasal cavity was much dilated, allowing the naso-pharynx to be plainly seen through it. The inferior turbinated bone was much wasted, and presented a deep concavity about its centre. By cleansing the nostril and touching some remaining granulations with solution of caustic, the discharge has now (February 28th) almost ceased, and has entirely lost its disagreeable odour. No diseased bone has been detected. The left cheek still appears larger than the other, and the malar bone more prominent on that side, the inequality being apparently produced by the long sojourn of the nasal calculus. The rhinolith was more or less filbert-shaped, and had, as usual, a rough and mammillated surface. When dry it measured approximately 18×13×8 millimetres and weighed nine grains. On section it was found to consist of tightly-

[1] Read before the Brighton and Sussex Medico-Chirurgical Society, March 3rd, 1887.

packed folds of ordinary rag, on to which the salts of the nasal secretion had become deposited.

Rhinoliths, which in spite of increased attention being directed to nasal subjects are still considered uncommon, usually have their origin, as in this case, in a foreign body introduced into the nose. The case just mentioned is, however, peculiar in the nature of the nucleus, and in the circumstance of such a soft body as a plug of rag having by the deposit which had taken place upon it produced no inconsiderable distortion of the neighbouring bones.

Brighton.

NOTES OF A CASE OF POISONING BY TARTAR EMETIC.

BY S. L. DOBIE,
SURGEON-MAJOR, 4TH MADRAS CAVALRY.

ON Jan. 6th, 1887, H. F——, male, Eurasian, aged fifteen, took by mistake about sixty grains of tartar emetic instead of Epsom salts. In ten minutes he broke out into a cold sweat and vomited. He was seen within a quarter of an hour of taking the poison. Vomiting was encouraged, and he was given tea, infusion of galls, gruel, and a small quantity of brandy during the day. Vomiting continued freely all day, and at night he was purged three times; was conscious the whole time.—7th: Vomiting continued; purging ceased; had milk and gruel; remained sensible.—8th: No vomiting or purging; doing well.—9th: About 11 A.M. he became feverish, then delirious. Had an enema, which acted; mustard and hot water to feet; mustard poultices to calves and nape of neck.—10th: Comatose; pupils widely dilated. Ordered enema of turpentine, which acted; six leeches to temples; counter-irritation to scalp, feet, and calves; blister to nape of neck.—On the 11th I was ordered into camp, and saw no more of the youth after the evening of Jan 10th. He remained comatose, was fed with spoonfuls of milk, and died at 2 A.M. on Jan. 12th, nearly six whole days after taking the poison.

The curious features in this case are that the patient lost the ordinary symptoms of antimony poisoning, seemed to be recovering on the third day, became delirious on the fourth day, and died comatose on the twelfth day.

Kamptee, India.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

GUY'S HOSPITAL.

SARCOMA OF THE FEMUR.—DEATH FOLLOWING NECROSIS OF THE LOWER JAW.

(Under the care of Mr. BRYANT.)

IN the case here recorded of sarcoma of the femur, the following points are chiefly of interest: the development of the disease after direct injury to the part, its malignancy, and extension to the interior of the knee-joint. Growth along the crucial ligaments would appear to be the usual mode of invasion of this joint, but the condition is rare; and it is easy to understand the increased difficulty experienced in diagnosis from primary joint disease. The second case is interesting from the extent of the disease, for which no cause could be found, and the fatal result.

CASE 1. *Sarcoma of the femur, spreading from an aperture in the bone to the periosteum and knee-joint; amputation of thigh; recurrence.* (From notes by Messrs. Bowes and A. Palmer).—C. P——, aged fourteen, a butcher's boy, was admitted on Sept. 15th, 1884. Three months ago he slipped down and knocked his knee. Slight pain was felt in the knee for a day or two; there was no swelling. About a week afterwards, as he was jumping over a hedge he again fell and knocked the same knee, which became painful and swollen; hot fomentations were applied. He consulted a doctor, who applied tincture of iodine and advised him to go to the Hertford West Infirmary, where he remained three weeks. Whilst there his knee was blistered. He was not confined to bed. The patient says the swelling began on the outer side of the knee and gradually involved the whole of the joint; it had been getting larger for the last three weeks, and was only painful at night, and then only at the back of the thigh.

On admission there was a large swelling over the right knee, involving the whole of the joint, most prominent on the outer side, where the swelling first began. There was no fluctuation. The popliteal space was very tense and tender, the tenderness extending along the flexor tendons up the thigh. The patella was quite superficial and movable, but did not float, showing that the trouble was in the joint itself. No glandular enlargement was perceptible in any part of the body, with the exception of one or two hard glands in the right groin. The knee was bent at an angle of 120°; it permitted of very little movement. There was also some thickening of the lower end of the right femur.

Sept. 16th.—Leiter's cold coil applied to the knee. The urine contains triple phosphates, but is otherwise normal.

18th.—The patient had much pain in the popliteal space last night, also in the back of the thigh. The front of the joint is tender. Appetite poor.

19th.—Chloroform having been administered, an exploratory incision was made near the outer condyle, and as a growth was found to exist the limb was amputated by anterior and posterior flaps. The muscles were found to be œdematous, especially in the posterior flaps, and a piece was removed. Silk sutures were applied, the stump was dressed with iodoform gauze, a back splint put on, a large drainage-tube introduced, and strapping applied between the sutures. On making an antero-posterior longitudinal section of the lower end of the femur and upper end of the tibia, the femur was found to be surrounded by a mass of new growth connected with the periosteum, and excavating the bone so that there was only a layer of bone about half an inch thick anteriorly in the lower end of the femur, the articular cartilage and bone representing the condyle to the extent of about one inch; all this was infiltrated with the growth. The bone was fractured immediately above the articular cartilage, and again three inches higher up, during the process of section. The posterior aspect of the femur three inches above the articular cartilage was entirely gone, hollowing out the substance of the bone, and forming a cavity filled with blood-clot and breaking-down growth. Projecting into the cavity was a spicule of bone about an inch and a half long, eroded, and continuous with the compact tissue of the bone-shaft on the posterior aspect. The tibia and patella were normal. In the joint were masses of growth, apparently coming through the capsule on the outer side, and passing forwards, on the one hand, over the outer condyle of the femur, and, on the other, to the outer margin of the articular cartilage of the patella; in both cases it could be raised off the articular cartilage, which did not seem to be affected by it; the growth also extended into the joint from the popliteal space, and here had run along the crucial ligaments, and apparently more or less destroyed them. The growth itself was a firm, opaque, whitish mass, with (especially along the anterior part of the bone) hard, radiating masses, which were doubtless points of ossification, feeling rough when scratched with a scalpel. What was left of the quadriceps muscle had a pale and more or less gelatinous appearance, and was very œdematous. Above the upper fracture the periosteum could be stripped off the bone, and appeared fairly healthy; but opposite to and below the fracture were fungating masses of growth which were fairly adherent to the underlying bone, and which on removal left it irregular and rough. The disease was clearly of a sarcomatous nature.

20th.—The patient passed a good night, with little or no pain, but says there is some throbbing of the limb. Evening temperature 102·2°.

24th.—The patient is going on well; very little pain. There are three or four glands in the groin, which seem to have got larger since the operation. Temperature 99°. Sleeps well; fair appetite; no cough. Limb dressed yesterday; there is a good free drainage, and the discharge (which is very slight) is quite sweet.

29th.—Stump dressed to-day; all the stitches taken out; limb looks well; drainage quite free, and only about three

teaspoonfuls of sweet discharge. A tonic containing iron and an occasional aperient were ordered.

Oct. 6th.—The stump is practically healed.

17th.—The stump is looking well, and the patient is up on crutches.

Nov. 2nd.—The patient slipped down in the ward yesterday, and hurt the stump a little.

28th.—Much fulness about the stump, and on the anterior part a hard roundish mass can be felt, but there is no tenderness. Circumference eleven inches.

December 12th.—Has complained of pricking pains in the stump for the last two or three days, and has been kept in bed.

15th.—Stump measured this morning: in circumference at ends of cicatrix 12½ in., and 9¾ in. in length from anterior superior iliac spinous process to end of stump. It is soft to the touch; tenderness only just behind external extremity of cicatrix.

25th.—The patient was sent to-day to Bognor Convalescent Home. He is afraid to use his artificial leg, as, after wearing it for two days, it caused a little inflammation in the glands of the groin, from pressure of the iron hoop round the top of the thigh.

February 23rd, 1885.—The patient was readmitted to-day, having fallen down whilst at Bognor. He has had great pain in the stump since. On examination there is a hard swelling, which seems like a nodular thickening of the end of the femur. No discolouration of skin or fluctuation can be felt. There is great tenderness of the stump.

March 9th.—The patient was discharged to-day. Stump swollen, and tender on moving it. The growth has recurred and the glands are also enlarged, so that any further operation would be useless. The stump on discharge was distended, firm, and tender, but neither the skin nor cicatrix had given way. The skin was normal in colour, but the veins were larger and well marked. On palpation in the loin some enlargement of the glands can be felt. The boy's spirits are excellent, his appetite is good, and there are no signs of secondary deposit in the chest.

CASE 2. *Necrosis of the lower jaw; death; necropsy.* (From notes taken by Messrs. Elliot and D. Jones).—M. H——, a woman aged forty-two, was admitted on Oct. 12th, 1885. With the exception of erysipelas of the face, which occurred twelve months ago, and congestion of the lungs, which she had five years ago, her general health has been good. On the 20th of June last the patient complained of cold, and her gums commenced to swell almost immediately; also the salivary glands under the tongue began to swell, until at the end of three weeks they had pushed the tongue up. During this time throughout the whole day she experienced a great secretion of ordinary saliva, which however, had a strong odour. Every morning when she got up her hands felt very cold and looked pale. They, however, assumed a better appearance as the day advanced. In three weeks' time the gums commenced to swell and the teeth to loosen. In four weeks' time the swelling in the submaxillary region commenced, and had gone on increasing. About this time her medical man was called in, who said that it was a case of necrosis of the jaw. He prescribed a strong tonic and a disinfecting gargle for her, and in a week's time the enlargement in the salivary glands subsided. No history was obtainable with regard to syphilis, mercury, phosphorus, injury, or carious teeth. She had not taken any medicine before her illness.

On admission there was a good deal of swelling about the maxilla, the skin feeling brawny and being of a dusky colour. On either side of the symphysis, below the inferior border of the bone, were two sinuses leading down to the bone, which did not appear to be quite bare, but was thinly covered with something soft. These sinuses discharged a fair amount of fetid pus. There was much tenderness about the jaw, and also great fixity, the patient not being able to open it more than an inch. She could not protrude her tongue. The teeth in the lower jaw were all loose, and the gums of both jaws and the mucous membrane over the hard palate were swollen and spongy, so as to overlap the teeth. Her breath was very fetid.

Oct. 15th: The two sinuses are distant respectively an inch and half an inch from the middle line. Bare bone was felt on probing. Ordered boracic acid and spirit gargle, with aperients, and to take fluid nourishment.

16th.—Temperature 103·2°.

18th.—Morning temperature 101·4°; evening 101·6°.

22nd.—During the last three days a large sinus has formed on the right submaxillary region, which leads down to bare bone. Four teeth were extracted.

25th.—Temperature last night and this morning 102·4°.

30th. Patient was very weak, and seemed semi-comatose. She could only open her mouth slightly, and the dresser could not make out what she tried to say. Her face was dusky, although the pupils were not unduly dilated. Had a startled expression when spoken to or touched. She takes all nourishment given her. Pulse very small, rapid, and weak. Respiration laboured (through nares), 46. She passes everything beneath her. Temperature 102·4°. Right submaxillary region presented an intensely fetid, oval, phagedænic ulcer, about three-eighths of an inch deep, three inches and a quarter before backwards, and two inches above downwards, extending from the middle line to about a quarter of an inch behind the anterior border of the masseter, the skin over which was dragged down in small vertical wrinkles; its edges were slightly everted, and not red. The base presented a large grey-black mass of shreds, not coming away easily. The attempt to remove what appeared the loosest shreds caused great pain. Superiorly the ulcer had extended just over the interior margin of the mandible, which was exposed and eroded; and posteriorly it had passed over the facial vessels; but as yet there was no hæmorrhage. In the base of the ulcer were some rounded pits, but it could not be seen whether they communicated with the buccal cavity; on holding a mirror over them, at the same time preventing escape of air through the nares, there was no sign of air coming through them. Discharge fetid and copious.

31st.—The patient had an injection last night; she slept well. She still takes a good deal of nourishment, but is much weaker than yesterday. The wound has been dressed twice each day with boracic acid and iodoform, but the wound is very fetid. Temperature 102·6°. The patient passed into an unconscious condition and died quietly.

Necropsy (conducted by Dr. Goodhart).—A partial examination only was permitted. On opening the mouth widely the hypertrophied condition of the gums was very marked. In the upper jaw it formed a thick ridge just within the row of teeth, giving the appearance of a second row. The anterior edges of the gums also overlapped the teeth very extensively. On examining the wound, a large piece of the lower jaw (right side) was seen to be necrosed; this was removed, carrying with it a few loose teeth and the altered gum tissue. It was found that there was a large piece of the lower jaw quite loose in the mouth; this was also removed, and proved to be the inner surface of the horizontal ramus of the lower jaw, as it formed a complete cast of its dental arch. The muscles beneath the tongue and soft parts forming the floor of the mouth were sloughing. The lungs were not examined, but the patient probably died of septic pneumonia. A section of the hypertrophied gum had the appearance of inflammatory tissue.

LEEDS GENERAL INFIRMARY.

COMPOUND FRACTURE OF THE SKULL; TREPHINING; SPASM OF MUSCLES OF FACE AND ARM; SECOND TREPHINING OVER THE FISSURE OF ROLANDO; RECOVERY.

(Under the care of Mr. M'GILL.)

FOR the notes of the following case we are indebted to Mr. J. Holt, house-surgeon:—

J. T. S——, aged thirteen, was admitted on February 9th, 1887, with a compound fracture of the skull. Shortly before admission he fell twenty-three feet on to his head; he does not remember receiving the blow, and was unconscious for a few minutes after the accident, but soon recovered his senses.

Condition on admission.—The patient is quite conscious, talks sensibly, and answers questions intelligently. There are no cerebral symptoms or constitutional disturbance. There is a compound fracture of the left side of the vertex of the skull, the skin wound being one-third of an inch in length. This is situated near the parietal eminence, and can be marked out exactly as follows: Take a point one inch and a half behind the centre of a line drawn from the root of the nose to the external occipital protuberance; from this point draw a line vertically downwards to the level of the upper border of the pinna of the ear; the centre of this last-named line corresponds with the position of the wound. Through the wound a depression can be felt in the

skull, and there is a small escape of brain substance. In the absence of symptoms it was determined not to trephine, but to dress the case antiseptically. This was accordingly done, the scalp being shaved, the wound and surrounding skin being irrigated with corrosive sublimate solution, and an antiseptic dressing applied.

Feb. 10th.—The patient has passed a quiet night. The pupils of both eyes are dilated, the right more so than the left; the right pupil does not respond to light. He is very drowsy, is roused with difficulty, but when roused seems quite sensible. In the evening it was determined to operate. The boy being placed under ether, the dressings were removed. The scalp felt soft and infiltrated for a couple of inches in all directions round the wound. Mr. M'Gill made a large crucial incision, leaving the original wound at its centre. From this point a fracture was seen extending upwards towards the vertex, and another backwards towards the occiput; both these fissures passed out of the region exposed by the reflexion of the scalp; at the junction of the two the skull was comminuted, these portions being depressed below the general level. Two of these, irregular in shape and one inch and three-quarters of an inch accross in their longest diameter, were removed, while the third was elevated. A small opening in the dura mater, through which brain substance was protruding, was seen. The edges of the skin wound were brought together by a few points of suture, small drainage-tubes being inserted in each of its four extremities.

11th.—Still drowsy. Slight facial palsy on the right side was noticed in the evening.

During the next two days there was not much change, the general drowsy condition was slightly improved, and the facial paralysis, though still slight, became more marked.

14th.—In the morning the right arm seemed weaker than the left, otherwise the condition is unaltered. The wound on the scalp looks healthy; there is no further protrusion of brain substance. At 7 P.M. the muscles on the right side of the face were attacked by clonic spasm, and during the night till 9 o'clock the next morning he had fifteen attacks of a similar character. All the muscles on the right side of the face were in a state of clonic spasm, the contractions numbering about 40 per minute; drawing up of the angle of the mouth and closing of the eye were particularly marked; on one occasion the patient bit his tongue. His head was twitched to the right side, the contractions of the platysma being clearly visible. The attacks last from three to five minutes; between them he sleeps, but seems to know when the fits are coming on, as he puts his handkerchief into his mouth to protect his tongue. In the second and third attacks the right arm was slightly affected, and in the seventh, at 3.45 A.M., the arm muscles were violently convulsed, and the leg also slightly implicated. After that time the spasms in the arm were as violent as those in the face, the whole limb being attacked, and the fingers, wrist, and elbow being alternately flexed and extended. Nothing further was noticed in the leg; its reflexes, superficial and deep, were normal. The optic discs were also in a normal condition.

15th.—At 9 A.M. there was a more prolonged attack, the right face, neck, arm, and forearm being violently convulsed. After this the patient seemed much exhausted. Mr. M'Gill determined to trephine at once over the lower end of the fissure of Rolando. Chloroform was administered, and a large flap, three inches across at the base and two inches and a half deep, was turned downwards, the anterior part of the former incision being utilised for the purpose. This flap, which included the upper part of the temporal muscle, having been reflected, the pericranium over the upper part of the temporal fossa was turned down, and a trephine one inch in diameter was applied a little in front of the centre of the lower antero-parietal area of Turner. The circular portion of bone was removed, and the dura mater, in which a large branch of the meningeal artery was visible, was exposed. This was next divided along the upper margin of the opening and a flap turned downwards, the artery in it being tied. There was slight hæmorrhage from the brain substance, which was arrested by sponge pressure. Nothing abnormal having been found, the dura mater was replaced and held in position by two fine catgut sutures; a small drainage-tube was inserted between it and the brain substance. The pericranium was next stitched up by another row of sutures; and, lastly, the skin flap was held in position by a few stitches, two drainage-tubes being placed at the most dependent angles of the wound. The operation was concluded at 11 A.M. At 1.50 P.M, the effect of the chloroform having passed off, he was convulsed as before in the face, neck, and arm. In the next twelve hours there were sixteen similar attacks. Then there was an interval, no fit occurring between 1.20 A.M. and 7.30 A.M. on the 16th. Till 7.15 P.M. there were eight attacks; the last one was of great severity, with increased frequency of the muscular contractions (120 per minute), and lasted for forty-five minutes. After this there were only four more fits, of gradually diminishing intensity, the last being at 2.50 A.M. on the 17th.

19th.—Wounds dressed and drainage-tubes removed; they look healthy and are healed in their deeper parts. The paralysis both of face and arm is much less marked. Two days later (Feb. 21st) the paralysis had almost entirely disappeared. From this date there is nothing special to remark; his convalescence was rapid, and on March 22nd he left the hospital with the wounds entirely healed and apparently in perfect health.

Remarks by Mr. M'GILL.—1. No operation was performed when the patient was admitted, there being no cerebral symptoms. This, though perhaps hardly orthodox, appears to be a reasonable proceeding. Few surgeons would operate for a simple depressed fracture of the skull without symptoms, and as by means of antiseptics the compound can be converted into what is practically a simple fracture, the same rule should apply. Apart from theory, experience proves that many cases of depressed compound fracture of the skull treated without operation make rapid and permanent recoveries. 2. How far the trephinings in this case influenced the result it is difficult to determine. It is possible that the operation and the arrest of the fits did not stand to one another in the relation of cause and effect. On the other hand, though no lesion was found, it is possible that some change of cortex existed at a short distance from the trephine opening, and that the relief of tension due to the operation was the cause of the favourable result.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Abdominal and Thoracic Aneurysms treated by the introduction of Steel Wire into the Sac.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair.

Dr. J. J. PRINGLE contributed a paper on a case of Aneurysm of the Abdominal Aorta treated by Laparotomy and the introduction of Steel Wire into the Sac. The patient was a man, aged forty-six, admitted to the Middlesex Hospital with the symptoms of aneurysm arising from the upper part of the abdominal aorta; there was no appreciable sign of cardiac or general arterial disease. Treatment for a month by rest, appropriate diet, morphia, and full doses of iodide and bromide of potassium was futile, the increase of the aneurysm being evidenced by aggravation of pain, extension of pulsation, and the development of a diastolic in addition to the systolic bruit previously present. The operation described was performed by Mr. Henry Morris, full details being given in the paper. The principal difficulties encountered were: (1) the introduction of the wire, which was coiled on a roller, into the cannula, necessarily held deep in the abdomen; and (2) the adjustment of the cannula between the outward force of the pulsation and the inward force of pressing the wire into the sac. Only about a foot of wire was introduced before an insurmountable kink stopped its further progress. No hæmorrhage of importance complicated the operation. For two days the patient progressed satisfactorily, but he subsequently became almost maniacal, and died of asthenia five days after the operation, his highest recorded temperature being 100·6° F. At the necropsy both sides of the heart were distended by mixed clot; there was no peritonitis beyond a narrow line of adhesion between the operation-wound in the parietal peritoneum and the subjacent viscera. The aneurysm was found to arise from the aorta at the level of the cœliac axis, and to be very saccular and filled with clot, more than one-third of which was laminated and presumably due to the procedure adopted. The remarks touch briefly upon the significance of the diastolic bruit present and the

advisability of giving ordinary medical treatment a protracted trial in similar cases, but refer principally to the treatment ultimately resorted to. The statistics of *proximal compression* of the aorta are analysed, and the results regarded as probably less satisfactory than recorded experience would appear to show, whilst the procedure is obviously inapplicable to the majority of aneurysms of the abdominal aorta, which arise too near the diaphragm. The records of *distal compression* are discouraging, as are those of *galvanopuncture* in similar cases, whilst the remarkable success obtained by Loreta, of Bologna, by the treatment here adopted justifies its trial. The result of that trial presents many encouraging features. Mr. Henry Morris adds remarks commenting upon the advantages of steel wire over fishing-gut or horsehair, advocates in future having the wire coiled on a reel held by the operator to enable it to be paid direct into the cannula, and suggests for discussion the question, "What is the smallest quantity of the foreign body which must needs be introduced to excite the requisite formation of clot?"

Dr. W. H. WHITE and Mr. PEARCE GOULD communicated a case of Sacculated Aortic Aneurysm treated by the introduction into the Sac of thirty-two feet of Steel Wire. The patient, a powerful man aged forty-eight, had noticed a swelling of the front of his right chest for five months before he came under Dr. White's care. Two months later cough and dyspnœa on exertion supervened. On his admission into the hospital on Nov. 20th, 1886, a prominent swelling was found in the position of the right mamma, extending from the second to the fifth rib, and from the edge of the sternum to the axilla; it was the seat of a forcible expansile pulsation, and over it was heard a harsh systolic murmur. Above the chest anteriorly, and down to the angle of the scapula behind, the resonance of the right chest was much impaired, and the respiratory murmur was distant and weak. The man was kept in bed, on a restricted diet, and was ordered fifteen grains of iodide of potassium three times a day. He continued about the same until the second week in January, 1887, when he was much excited, and the swelling was noticed to increase rapidly in size and to become very prominent. It was then decided to employ Moore's treatment, and on January 11th Mr. Pearce Gould passed thirty-two feet of steel wire into the aneurysm through a Southey's cannula, introduced in the third intercostal space. A good deal of blood was lost during the operation, but the hæmorrhage was quite stopped by a pad of lint. The tumour became harder, and the pulsation more heaving in character, and from one of the punctures (two had been made) reddish serum continued to drain in considerable quantities for several days. Accordingly, on January 17th the pad of lint was fastened on more firmly; next day there was observed great swelling of the subcutaneous tissue over the aneurysm, and on the 19th the skin was found to be gangrenous, and in a few hours the patient died. At the necropsy the first part of the arch of the aorta was found dilated to the size of a large orange, and springing from the upper part of this dilatation was a sacculated aneurysm the size of a cocoa-nut. The intra-thoracic portion of the tumour had a distinct but thin sac, but that part which protruded from the chest was destitute of a definable sac, and was limited by infiltrated muscle. The wire together with loose fibrinous clot formed a very dense mass, nearly filling, but not adherent to, the sac. The authors suggest that the fatal result was largely due to the absence of a distinct sac to the outer part of the aneurysm, and to the effects of the formation of a very hard solid mass in the aneurysm, combined with rather firm external pressure applied for the arrest of the serous oozing. They submit the following conclusions: 1. Moore's treatment is worthy of further careful trial in properly chosen cases. 2. The operation should be performed before there is reason to suspect rupture of the sac. 3. Only a small quantity of wire should be introduced at any one time. 4. No firm pressure should be made over the aneurysm afterwards.

Mr. J. W. HULKE related a second case on which he had recently operated. The treatment was absolutely innocuous, and perhaps slightly beneficial. The patient was a sailor, who fell from a height on Oct. 13th, 1885, and three weeks after the accident a swelling appeared at the root of the neck on the right side. For this aneurysm he was treated with some success at St. Mary's Hospital. On Aug. 19th, 1886, he was admitted into Middlesex Hospital, under the care of Dr. Cayley, who, with Dr. Douglas Powell, diagnosed a large aneurysm probably of the innominate and aortic vessels. After rest in bed and a large dose of iodide of potassium the patient was placed under strict Tufnell treatment from October to January, 1887, with the result of a slight diminution in the size of the aneurysm, but without real improvement. He left the hospital only to return in a month, and on the same day of his readmission, Feb. 24th, for increased pain and swelling in the aneurysm, of which the coverings were extremely thin, Mr. Hulke introduced thirty-three feet of steel wire. There was no trouble at the operation, and the wire was introduced through a cannula, hand over hand. After its introduction palpation revealed some degree of hardness of the sac. On March 1st there was increased pain and much arterial tension, which was relieved by bleeding to the extent of five or six ounces, enabling a good night's rest to be obtained. The man died on the 9th—i.e., thirteen days after the operation. The aneurysm examined by Mr. Leopold Hudson appeared to have begun in and been limited to the first part of the subclavian artery, and exhibited but a small amount of clot about the wire. There was no appearance of inflammation in the large space. In the first case already recorded he had had some difficulty from the kinking of the wire, but not in this second case. A tubular needle furnished with a couple of wheels for paying in the wire without touching it with the fingers would afford much aid. A rough model of this apparatus, devised by the surgical mechanician, was handed round.

Mr. HOWARD MARSH opined that the usual length of wire introduced was far too great.

Mr. T. BRYANT said that in Mr. Morris's case it was clear that the aneurysm was on the way to a cure. In Mr. Hulke's and Mr. Gould's cases there did not appear to have been any signs of healing: but in Mr. Gould's case it would seem that the large mass of wire might have been actually harmful. Still, the facts obtained by experience up to the present were not unfavourable to the operation in itself. It was almost impossible to determine with accuracy the size of an aneurysm in the throat, and so it would be difficult to say how much wire should be introduced. In the thoracic cases, perhaps, a repetition of the introduction of wire might be feasible and advisable; but this could hardly be so for abdominal aneurysms necessitating abdominal section and where the size of the aneurysm was more definable. The evidence seemed to show that the steel wire did harm in Mr. Gould's case. The use of good fishing-gut would, in his opinion, be preferable to wire. The point of steel wire must be more or less injurious, and if cut off close to the skin might become a source of irritation to the tissues. A blunt trocar might be employed with a view to pushing the cut end of the wire into the centre of the aneurysmal sac.

Mr. T. SMITH could not but be struck with the mechanical difficulties in the carrying out of the operation. A hollow needle, he agreed with Mr. Hulke, would be more suitable, and he thought that such an instrument already existed in the shape of the needle employed in cleft palate and vesico-vaginal fistula. The mill-edged wheel acted as an efficient payer-in of the wire.

Dr. PRINGLE, in reply, said that an objection to the employment of galvanism in the introduction of the wire was that the clot resulting from electrolysis is distinctly softer than ordinary clot. He would have been glad of suggestions as to any other feasible operation in cases of abdominal aneurysm, which usually encroached on the diaphragm.

Mr. HENRY MORRIS said that there would be much less tendency for the wire to assume the coil shape if a straight needle were used, such as Mr. Smith recommended. He recognised the force of Mr. Bryant's remarks, but he was not aware till now that fishing-gut could be made to coil up. Large quantities of wire would offer an obstacle to one very important element in the cure of the aneurysm—viz., retraction and contraction of the sac.

Dr. HENRY WHITE said that the aneurysm proved not to be so large as it appeared during life, and doubtless this was one reason why so much wire was introduced.

Mr. PEARCE GOULD, in reply, said that Mr. Moore, in first performing this operation, appears to have used a blunt trocar to thrust the end of the wire into the centre of the sac. The needle of Mr. Hulke or of Mr. Smith would leave the end of the wire out in the subcutaneous tissues. In future cases he would not use anything approaching the quantity of wire employed in previous cases. He shared Mr. Bryant's opinion that the evidence was against the employment of steel wire.

PATHOLOGICAL SOCIETY OF LONDON.

Alveolar Ulceration in a Child with General Tuberculosis.—Hypertrophic Goitre, with Secondary Tumours in Bones of Skull.—Tumour of Pineal Gland.—Chronic Inflammatory Disease of Uterine Appendages.—Meningeal Cerebral Hæmorrhage, with Secondary Degeneration of Spinal Cord.

AN ordinary meeting of this Society was held on the 5th inst., Sir James Paget, Bart., F.R.S., President, in the chair.

Mr. JONATHAN HUTCHINSON, jun., showed some specimens of Alveolar Ulceration and General Tuberculosis, obtained from a child aged two years, who died while under the care of Dr. Stephen Mackenzie. When twelve months old she had had measles, and subsequently became cachectic, and for a considerable time had suffered from ulcerative stomatitis, or "putrid sore mouth," which had caused several of the lower teeth to fall out and had invaded the lower lip. At the necropsy the peritoneum and abdominal viscera, especially the liver, were found to be the seat of miliary tuberculosis. The tubercles were disseminated throughout the liver, and in its capsule occurred as minute elevations one-tenth of an inch in diameter; they appeared to be of recent formation, though slight caseation had occurred in a few. It was uncertain whether any causal relation existed between the stomatitis and the tuberculosis, as the latter was a rare complication, nearly all the cases of ulcerative stomatitis in children recovering under the use of chlorate of potash or other treatment. Nor did sections of the affected gums and lip show tubercle bacilli or any tuberculous structure. The surface of the ulcers was ragged, and for a varying depth was in a necrotic condition, the structures being ill-defined and not staining well. In the lip the muscular bundles next the surface were matted together, and the striation was indistinct. Micrococci were plentiful in this layer, but the long bacilli found by Lingard and Batt in ulcerative stomatitis of calves and in a case of noma were not present. Under the necrotic layer there was considerable inflammatory cell-effusion. It was stated that ulcerative stomatitis of children could be inoculated (Bergeron), but the microscopical appearances would confirm the clinical evidence that this disease was quite distinct from noma and from the ulcerative stomatitis of calves and other young animals.—Mr. F. TREVES said that there were many arguments in favour of the suggestion that the ulcerated tongue was the seat of inoculation of tubercle.

Dr. JOSEPH COATS introduced a case of Hypertrophic Goitre with secondary tumours in the skull. The thyroid gland presented considerable enlargement of both lobes. The tissue of the enlarged gland was that of ordinary goitre—namely, greatly multiplied saccules, with occasional colloid matter in them. There were two further changes, both of which evidenced chronicity in the growth—namely, fibroid induration and calcareous infiltration. This latter change was in the indurated connective tissue, and probably in connexion with some necrosis. The goitre was first noticed sixteen years before death. There were several tumours in the skull, only one of which was visible during life, and had been observed for a year and a half; this was in the occipital region, and it formed here a pulsating swelling. This tumour replaced the bone of the skull over an area an inch and three-quarters in diameter, and projected both outwards and inwards, pushing the torcular herophili before it. Another projected chiefly inwards, and was adherent to the dura mater. All the tumours apparently originated in the diploë of the skull. Their structure was identical with that of the goitre, consisting of innumerable small saccules lined with epithelium, and occasionally with colloid contents. Dr. Coats referred to Cohnheim's case, which was of a similar nature; and he also quoted a case of Wölfler's in which a tumour, removed during life by Billroth from over the eye, was found to have typically the structure of the ordinary goitre. This patient was also affected with goitre.—Mr. R. J. GODLEE had examined Mr. Morris's specimen of pulsating tumours of the left parietal bone associated with other similar tumours of the right clavicle and both femora recorded in the Pathological Transactions, vol. xxxi. There was also a goitre in this case, and the tumour of the skull showed thyroid-like tissue.—Mr. G. R. TURNER mentioned a case of goitre associated with secondary growths in the lung reported in the Pathological Society's Transactions.—In reply to Sir James Paget, Dr. COATS said that Wölfler had figured many tumours of the thyroid: carcinomata, sarcomata, and the ordinary forms of goitre. In some cases of advanced goitre the formation of colloid was often more pronounced, leading to the formation of large cysts. In reply to Mr. Godlee, he said that he had not detected sarcomatous tissue in cases of ordinary goitre.

Dr. JOSEPH COATS also showed a large Tumour of the Pineal Gland. The tumour, which consisted of two rounded lobulated masses, measured about three inches transversely, and two inches from before backwards. It was surrounded by a capsule and loosely attached, except at one point which corresponded to the situation of the pineal gland. In its growth it had dislocated and disturbed the neighbouring structures, the parts affected being there normally in relation to the pineal gland. The corpus callosum, choroid plexus, and velum interpositum were pushed upwards, the corpus callosum being greatly softened. The corpora quadrigemina were pushed backwards and upwards, and the thalami optici outwards and forwards, these parts being greatly flattened. The bulk of the tumour was in the third ventricle, but it had also extended somewhat into the aqueduct and fourth ventricle. The structure of the tumour was very peculiar—namely, a basis of sarcomatous structure, with pieces of cartilage and epithelial or glandular structures embedded in it. The sarcomatous cells were chiefly spindle-shaped, and some of them in the shape of the nuclei and general arrangement suggested smooth muscle. The cartilage was hyaline, with the cells unusually abundant. The gland structures were in the form of saccules or ducts lined with epithelium, usually cylindrical. The saccules were occasionally dilated, but did not form true cysts. Dr. Coats was disposed to call the tumour, from its structure, an adenoid chondroid sarcoma. He referred to four other cases of similar forms of tumour, recorded by Weigert, Falkson, Ziegler, and Turner, in all of which the structure was complex, with epithelial or glandular structures, and in three of the cases with cartilage. The observations of Baldwin Spencer on the pineal eye were referred to as indicating the original complex structure of the pineal gland, and it was stated that the embryonic structure indicated that the pineal gland was an epithelial body.

Mr. LAWSON TAIT read a paper and exhibited fifty-eight specimens, removed during the year 1886, illustrating the Pathology of Chronic Inflammatory Disease of the Uterine Appendages. Although Ruysch had recognised these diseases, their frequency and serious nature had only been allowed during the last ten years. The frequency was somewhat indicated by the fact that Mr. Lawson Tait had operated sixty-three times, with but one death, during the past year. All the patients had suffered for years. Cases were grouped under four headings: (1) simply catarrhal; (2) due to exanthematic disease at puberty; (3) gonorrhœal; (4) inflammatory mischief in the pelvis in the post-puerperal condition—i.e., after a miscarriage or a full term labour. A fifth was added by Mr. Tait: cases in which the only explanation was the existence of an infantile condition of the uterus due to arrested development. Retroversion, with complete fixation and enlargement of the appendages, was general. The preponderating influence of the third and fourth causes was at once indicated by the fact that out of the sixty-three cases there were only ten unmarried women. Of these ten single women, there can be no doubt that in at least three of the instances the origin was gonorrhœal. In two of the single women there had been pregnancies, and these were in all probability the source of the diseased appendages. In one case prolonged efforts had been made to cure anteflexion by means of intra-uterine pessaries, and this doubtless resulted in the double pyosalpinx. Of the four remaining cases in single women, two were probably due to scarlet fever. In the fifty-three women who were married, the average age was a little over thirty-three years. Of these, twenty-three had never been pregnant, and they had been married on the average ten years. Of the remaining thirty cases, sixteen had been pregnant once, the pregnancy occurring immediately after marriage, and being associated in every instance with the history of subsequent pelvic trouble. The average interval in these cases between the pregnancy and the time of the operation was eleven years. Only fourteen of the patients had more than one child, and the average period between the last pregnancy and the time of the operation was six years. These facts were enough of them-

selves to show how completely sterility is produced by chronic inflammatory disease of the uterine appendages. In by far the greater majority of the specimens the occlusion has taken place by the trumpet getting glued on to the ovary. The frequency of this occurrence substantiates, to some extent at least, the tradition that the infundibulum gets fastened on to the ovary temporarily at some time or other in connexion with the process of ovulation. Formerly the author thought he should be able to prove that this relation did actually occur, but he has never been able to make himself certain of it. In some cases the trumpet is found to have closed its tentacles, like a polyp, and to have had them coalesced in that position, leaving the ovary free. In the group of twenty-three women who had been married for an average period of ten years and had never been pregnant, there can be no doubt, from the clinical histories of nearly a third of them, that the disease arose from old latent gonorrhœas or gleets in their husbands excited into activity by the indulgence of early married life. In rather more than a third the author believed the disease originated in the exanthematic diseases of girlhood, most especially scarlet fever; and in the others no clue to causation could be obtained. In the second group of fifteen women in whom there had been one pregnancy within a short time of marriage, we assume, of course, that at the time of marriage their productive machinery was intact. In all but two of these cases, the story of pelvic peritonitis following their only labour placed them clearly in the group in which puerperal mischief has to be regarded as the cause. In the exceptional two, the author believed that he failed to get the history rather from the stupidity of the patients than from an absence of the facts. A third group was readily formed of fourteen women whose fecundity was not limited to one child. In this group were found the most acute and severe cases. At least eight of these women suffered from subacute or even acute gonorrhœal salpingitis of comparatively recent origin, the average time which had elapsed between the last pregnancy and the operation being three years. On the other hand, in the six other women in this group in whom the author could get no such history (or doubtfully in two of them), fourteen years had on the average elapsed between their last confinement and the date of the operation. These facts have a striking pathological significance. In the acute or early stage the appendages are intensely congested and swollen, and are very friable. In fact, it is a matter of difficulty to remove them entire. In the old-standing cases the organs are contracted and atrophied, and few if any traces of normal follicles can be discovered in the cirrhotic and densely adherent ovaries. At this stage the tubes generally contain very little fluid, and their contents are sometimes cheesy. They may be purulent on one side and serous on the other. Certain it is that neither the quantity of this fluid nor its pathological characters bear any definite relation to the sufferings of the patient. The pain endured in these cases is related to the adhesion of the organs, and to nothing else. The author had been much interested lately in reading a paper by Dr. Säuger of Leipsic, in which he determines varieties of tubal disease by the application of the germ theory, giving to the varieties names based on the kind of lowly organisms found in the contents of the tubes. Thus when a gonococcus is found he speaks of salpingitis gonorrhoica; and when he finds actinomycetes he calls it S. actinomycotica. If it is characterised by Koch's bacillus tuberculosis, he records it as S. tuberculosa. This kind of distinction seems to the author to have much attraction for the speculative mind, and but little for the practical pathologist. It has, besides, the initial difficulty that it is based on a doctrine which has yet to show that it is not mistaking the phenomena of decomposition for those of disease. Since reading Säuger's paper the author had given some little attention to the fluid contents of the tubes, and he had already found evidence that if the distinction of varieties were to be based upon the characters of the lowly organisms present in the fluid, the probability was that their extension would be indefinite and easily multiplied. In conclusion, the author submitted a post-mortem preparation for which he was indebted to the kindness of Dr. Littlejohn of Edinburgh; it was an example of the simple hydrosalpinx without adhesions, and so far as its clinical history could be ascertained the patient suffered little or nothing, but was perfectly sterile. Also an admirable drawing made by Dr. Keiller, used in his lectures nearly a century ago, which showed the condition of occlusion and distension of the tube most beautifully. Also some drawings of Dr. Price of Philadelphia, showing the ovaries and tubes in a condition of acute gonorrhœal inflammation.

Mr. ALBAN DORAN showed specimens illustrating the Development of Tubo-ovarian Cysts as a result of Inflammation of the Uterine Appendages. He exhibited a pair of appendages which had recently been removed by Dr. Bantock from a woman aged twenty-three, subject to chronic pelvic pains and other severe symptoms. The right tube and ovary had undergone complete cystic degeneration, so as to form a cyst with one cavity. The left tube was dilated; a cyst had formed in that part of the ovary most distant from the dilated tube. Mr. Doran showed a series of diseased appendages from the museum of the College of Surgeons, where every stage of the process of conversion of chronic inflamed appendages into tubo-ovarian cysts was demonstrated. On the other hand, he had never succeeded in finding a tubo-ovarian cyst developed as a part of the process of development of the common ovarian cystic tumour, a non-inflammatory disease. Hence he believed that tubo-ovarian cysts almost invariably represented an atrophic inflammatory condition.—Dr. HADDEN referred to the frequency of tubercular disease of the Fallopian tubes. Why was the outer half of the tube more dilated than the inner?—Dr. ANGEL MONEY said that tubercular disease of the abdomen in children frequently got well. He had seen genuine tubercular pyosalpinx in children.—Dr. JOSEPH COATS also thought that tubercular disease was also a common cause of disease of the Fallopian tubes. He had seen it nearly always in tubercular peritonitis. It might also occur alone.—Dr. GRIFFITH remarked that he had been lately engaged in investigating the subject of tubo-ovarian cysts, the literature of which was very scanty, and a paper by him on the subject was now in the hands of the Obstetrical Society. His investigation led him to the conclusion that there were two kinds in addition to that described by Mr. Doran, the rarest of which was formed by the union and communication of a dilated tube with one loculus of the common multilocular cyst. Another variety which seemed to be very uncommon was that first described by Adolphe Richard, consisting of a dilated tube adherent to and communicating with a thin-walled unilocular cyst of the ovary, the size of a child's head, or smaller, producing a tumour having the shape of a retort, and containing thin watery fluid, more resembling the contents of a broad ligament than an ovarian cyst. These were discovered in young women in whom the history and evidence of past inflammation were very scanty. Dr. Griffith believed that the specimens brought forward by Mr. Lawson Tait would well repay careful examination. The clinical history and histology of diseases of the tubes had yet to be investigated.—Mr. LAWSON TAIT said that he treated only of cases operated on by him during the past year. He had seen but one case of tubercular pyosalpinx, on which he operated, and the patient recovered, which made him doubt the tubercular nature. He agreed with Mr. Doran's view of the mode of formation of tubo-ovarian cysts.—Mr. ALBAN DORAN, in reply to Dr. Griffith, stated that "tubo-ovarian cyst" was a matter of definition. Many of the observers to whom Dr. Griffith referred appeared to apply the term solely to cases where the tube had communicated with a true ovarian cyst.

Dr. HALE WHITE showed a specimen of Old Meningeal Hæmorrhage, with Cerebral Softening and Secondary Degeneration, which was taken from a patient who died owing to the effects of a femoral hernia. From the history it would appear that the meningeal hæmorrhage took place eighteen months previously. At the necropsy ante-mortem clotting in the sinuses was discovered. On the left side, over the ascending parietal and frontals, and the back part of the first, second, and third frontal convolutions, there was some soft yellowish-white material, evidently old blood clot. The grey matter over the area mentioned had quite disappeared; the white substance immediately underneath was a little altered; no distinct degeneration could be seen in the pons or internal capsule, but the pyramidal tract in the medulla, and both the crossed and direct pyramidal tracts in the cord, were distinctly degenerated, being grey, translucent, and hard-looking. The lateral column was smaller on the affected side than the healthy. The microscope showed the sclerotic changes to be the same as those usually described.

The following card specimens were shown:—Mr. E. H. Fenwick: Tumour of the Bladder. Dr. Turner: Congenital Stricture of the Jejunum. Dr. Hale White: (1) Peripheral

Neuritis; (2) Dilatation of the Ureter and Hydronephrosis of one side, secondary to stricture of urethra. Mr. D'Arcy Power: Sequel to case of Endosteal Sarcoma. Dr. Thin for Dr. B. Rake: Drawings of Bacillus of Leprosy. Dr. Edmunds: Carcinoma Myxomatodes. Mr. F. W. Clark: Acute Pericarditis. Mr. Hudson: Colloid Cancer of Stomach. Dr. Allchin: Perforating Ulcer of Duodenum. Mr. Shattock: (1) Congenital Dislocation of Hair; (2) Two specimens of Osteomalacia, showing metaplasia of osseous into fibrous tissue.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of this Society was held on Wednesday, April 6th, Dr. John Williams, President, in the chair.

Uterus Bicorpor.—Dr. HANDFIELD JONES showed a uterus having one cervix and two bodies. The left horn had been recently pregnant, while the right one was enlarged, either from sympathetic hypertrophy or owing to subinvolution after previous pregnancies of the right horn. The woman had died of puerperal eclampsia after her fifth confinement. Douglas's pouch was bipartite.

Anterior Parametritis and Perimetritis.—Dr. W. S. GRIFFITH showed two characteristic specimens of these conditions with drawings.

The Mechanism of the Third Stage of Labour.—This paper, by Dr. CHAMPNEYS, was the second of a series, and dealt with the Expulsion of the Placenta. The author reviewed the literature of the subject, including the observations of Lemser, Salin, Duncan, Schultze, Ribemont, and Ahlfeld. He showed that the question centres round the opposing views of Schultze (which are corollaries of those of Baudelocque) and those of Duncan. The difference is as to the presence or absence of hæmorrhage as part of the normal procedure, including the inversion of the placenta, this being described by Schultze and denied by Duncan. Direct observations are very few and are contradictory. The author gave his own observations of 70 cases, carefully observed and tabulated, as regards the manner of the expulsion of the placenta and the blood lost in each case. The fœtal surface presented in 64, the maternal in 2 (in both of which the cord had probably been pulled upon), the amnion in 4. Adding his results to those of Pinard and Ribemont, the author found that the fœtal surface presented in 127, the fœtal edge in 27, the maternal surface in 5. The presenting point was nearer the lower edge of the placenta in 65, nearer the upper edge in 1, midway in 2, no note of its position in 2. The lower edge, or amnion below the lower edge, presented in 16. In the great majority of cases a point within two inches of the edge presented, but on the fœtal surface. There was a complete absence of fundal attachments. It was found that the presenting part varies in its position with the position of the placenta. The higher the placenta the higher the presenting point, and *vice versâ*. The average loss of blood before the expulsion of the placenta was six ounces, in the membranes or with the placenta six ounces, making an average of twelve ounces for each labour, not including post-partum hæmorrhages. The author believes that a moderate loss of blood is a normal phenomenon of the third stage of labour; the third stage of labour is not either actually or nearly a bloodless operation. He concludes finally that—1. Some measureable hæmorrhage is a normal constituent of the phenomena of the third stage of labour. 2. The placenta presents in the great majority of cases by a point on the amniotic surface. 3. The presenting point is almost invariably near the lower edge of the placenta. 4. The position of the presenting point varies with the position of the placenta. 5. The "inversion" of the placenta is not due in the great majority of cases to traction on the cord, but is part of the natural mechanism. These observations, therefore, accord in essentials with those of Schultze, though his diagrams are greatly exaggerated. These observations bear on the opinion previously expressed as to the causes and mode of *separation* of the placenta. Therefore—1. It is probable that, in addition to reduction of the placental site, some escape of blood plays a part in the ordinary mechanism of placental detachment. 2. The slight inversion of the placenta, which does take place, is probably due to this cause. 3. The effusion of blood is not, in ordinary cases, sufficient to form a large mass bulging into a large uterine cavity behind the placenta. Dr. MATTHEWS DUNCAN congratulated the Society on the elaborate paper just read, not only on account of its intrinsic value, but also because of its affording the Society an opportunity of contributing to the progress of the greatest obstetric work of the century. In the history of midwifery there were only three works of the very highest class as yet achieved. The first in scientific order of progress was done in the eighteenth century by W. Hunter, whose plates on the "Anatomy of Pregnancy" were its crown. The second was a work mainly of this century, and was known as the "Mechanism of Parturition," and with it were connected many names, especially those of Solayrer and of Naegele. The third was still incomplete, the greatest, most difficult and most glorious of all, a work of the nineteenth century, the "Anatomy of Labour." In this country no name was so great in the anatomy of labour as that of Barbour, and he was actively engaged in it at this moment. No contribution to it had come from London, and the papers of Dr. Champneys he hailed as worthily bringing a part of it before this Society. The anatomy of labour made no progress till the introduction of homalographic sections of frozen bodies. No such sections had been done in London, and nowhere had such sections been made in the third stage of labour. The work of Dr. Champneys was mainly physiological, and should come after the completion of the anatomy of the third stage, for the subject of his work would not be settled till the anatomy was finished. Failing to find bodies for the sectional anatomy of the third stage, obstetricians had examined the uteri of the operation of Porro. This was an imperfect substitute for frozen sections, and might be very misleading. The Porro uterus examined by Barbour showed that the placental area might be contracted to a diameter of four inches without separation, and the absence in these cases of hæmatoma was hostile to the theory of separation by utero-placental hæmorrhage, but it did not disprove it. Absence of separation, with contraction to an area of four inches in diameter, seemed to astonish many, and to favour the detrusion theory of separation. Dr. M. Duncan always imagined a much greater contraction as necessary for separation. He referred to his own paper of 1871, which was now a matter of "ancient history." Yet, admitting its imperfections, he was still an unbeliever in the presence of hæmatoma in a natural separation in a theoretically natural case, and he continued to hold that the cake descended edgewise through the cervix, and a reference to Dr. Champneys' table, columns A and B, confirmed this. The old detrusion theory of separation he had found difficult to make intelligible. He could not understand the production of detrusion till after separation. He could not imagine detrusion pushing off the lowest flap (as in the Porro case exhibited by Dr. Galabin) without pushing off all above it.—Dr. GALABIN understood that the author had not come to a decided opinion whether the separation of the placenta was from the periphery to the centre or *vice versâ*. Dr. Galabin thought this depended on the cause of separation. If the cause were from shrinking of the placental site, separation must be from the periphery inwards. If hæmorrhage were the cause, it must occur away from the margin, and could only effect a separation from the centre towards the periphery. Even if it were admitted that an effusion of blood is normally present, it does not follow that the hæmorrhage is a cause rather than a consequence of detachment.—Dr. Galabin thought that the Porro uterus was in favour of shrinking of the placental site, with possibly detrusion as a cause of detachment, and not hæmorrhage. Detrusion, acting as a supplementary cause to shrinking would cause detachment of the *lower* margin first. As regards the mechanism of expulsion, he thought it depended on the management of the third stage of labour. In Salin's cases the placenta presented at the os by its lower margin, and there was no inversion. In Dr. Champneys' cases there was partial inversion. In Lemser's cases the upper edge usually presented. The probable reason was that the management of Salin's cases promoted the best uterine contraction; that of Lemser's the greatest relaxation; that of Champneys' an intermediate condition. Dr. Galabin did not think that leaving the uterus unsupported with the patient on her side and the fundus dependent would give the most ideally natural mechanism.—Dr. HANDFIELD JONES thought that an ideally healthy labour was bloodless as regards the separation of the placenta, though there might be variable amounts flow afterwards.—Dr. BOXALL thought there were causes for separation of the placenta not mentioned in Dr. Champneys' papers. After

the birth of the child the conditions were profoundly altered: the flow of blood from the fœtal portion of the placenta to the lungs ceasing, the thin lamina of maternal tissue is deprived of support towards the cavity of the uterus. The position in which the placenta is implanted on the uterus Dr. Champneys had shown to be important, and this again was indissolubly connected with the separation of the membranes. As long as the membranes at the edge of the placenta remain adherent to the uterine wall, inversion of the placenta is maintained. If any portion of the attachment gives way, the adjacent margin of placenta, being no longer supported, becomes the most dependent part, and the subplacental hæmatoma finds an exit of escape, and the lower the implantation of the placenta the more easily will this happen. There were other causes that altered the process of detachment, as pulling on the cord and abnormal adhesion. Dr. Boxall explained a series of experiments which he had made to determine the placental presentation by means of staining. He also confirmed Dr. Champneys' remarks on the rarity of fundal attachment of the placenta. He had found the fundus overlapped (to the extent of an inch and three-quarters) only once. Out of one hundred cases, he should say that the placenta would occupy the upper zone in twenty-one, the middle zone in seventy-seven, and the lower zone in two.—Dr. GANDY wished to know if kneading of the uterus was made use of to expel the placenta.—Dr. W. S. GRIFFITH thought there was some analogy between the detachment of the membranes in membranous dysmenorrhœa and the detachment of the placenta.—Dr. CHAMPNEYS replied.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

AN ordinary meeting was held on Feb. 4th, Dr. S. C. Smith, President, in the chair.

Method of Ligaturing an Intercostal Artery.—Mr. CLIFFORD TURNER described a method by which a special curved needle was passed below the vessel and upwards over the rib, the ligature being tied over a pad. He described various modifications of the process, according to the position of the wound and the age of the patient.

Resection of Bowel for Intussusception.—Mr. LAWFORD KNAGGS described a case of laparotomy for intussusception in a young child, and showed the removed portions of gut. The patient died in a few hours. In a review of the treatment to be adopted in such cases, he recommended the cautious use of inflation, and should this be unsuccessful, immediate laparotomy to be had recourse to.—Mr. PRIDGIN TEALE, who had seen the case, said he thought abdominal section should be more frequently done in these cases. He described several cases—one in a man of eighty-six, where he had removed gangrenous bowel and sutured the ends of the gut together. The patient lived six days, dying of exhaustion, the obstruction having been relieved.—Mr. MCGILL had decided that in the next case under his care he would make a longitudinal incision over the distended bowel, withdraw and incise the invaginated portion, stitching the opening to the skin, making a fæcal fistula which could be dealt with afterwards. He thought that excision of gangrenous bowel and suture must nearly always be fatal.

Hemianopsia.—Dr. WARDROP GRIFFITH described, with the aid of diagrams, the several varieties of hemianopsia and their probable anatomical relations, both with regard to lesions of the optic tract and internal capsules and the cortex of the brain. He related several cases where a permanent hemianopsia appeared to indicate grave organic disease.

Pathological Specimens.—Dr. CHADWICK showed some Living and Preserved Specimens of the Filaria Sanguinis Hominis, from a case under the care of Dr. Stephen Mackenzie.—Mr. MAYO ROBSON showed (1) a Foot with extensive Sarcomatous Disease of bone; (2) a Hydrocele in the Sac of an old Hernia, the neck being sealed by a piece of omentum.—Mr. BACON showed a Larynx from a case of poisoning with Carbolic Acid, much eroded by the action of the irritant.

A meeting was held on March 4th, Dr. Eddison in the chair.

Raynaud's Disease.—Dr. ERNEST JACOB described two cases of this disease lately under his care, one of the patients being exhibited. Case 1: A lad of twenty from his ninth to his twelfth year used to handle a wet chain in a colliery. His hands ever since had been always cold. The fingers were stiff, blue, and cold, and subject to acute pain. There was no arterial disease, and his general health was good. He improved under the use of iron internally and a stimulating liniment to the hands. Galvanism was tried in vain. Case 2: A laundress, aged fifty-seven, began to suffer from coldness and numbness of the hands thirty years ago, with severe pain of lancinating character. This recurred whenever her hands were at all exposed to cold. Two years ago she became worse; the fingers became black and discoloured, remaining so for two or three weeks, when they would become red, and the nail drop off, being succeeded by a new nail. Gradually gangrene supervened, and the tips of the first and second fingers of the left hand had disappeared. On the right hand the first finger had lost the two terminal phalanges and the little finger the third. The general health was not good, and though the arteries seemed healthy, there was an aortic regurgitant murmur. She had since been an in-patient in the infirmary under the care of Mr. McGill, the gangrene having still further progressed. The history of the disease was referred to, its pathology as a vice of arterial innervation, and its clinical connexion with the "night palsy" described by Dr. Weir Mitchell, paroxysmal hæmatinuria, and different varieties of vaso-motor spasm were alluded to.

Treatment of Mastitis.—Mr. C. J. WRIGHT described a number of cases of painful lactation or inflamed breasts, in which he had found firm pressure by a bandage or towel afford great relief to the pain and other symptoms. Abscesses were to be opened antiseptically, and poulticing to be used as little as possible.—Mr. A. ROBERTS spoke of the advantages of fomentation with solution of ammonium carbonate.—Dr. PURDY had been disappointed at the results both of pressure and ammonium carbonate fomentation.—Mr. J. W. TEALE thought belladonna plaster useful mostly through the support it gave; he spoke highly of pressure, but generally gave a morphia injection as well.

Dangers of Cocaine.—Mr. A. ROBERTS described a case where he amputated the breast after injection of cocaine, sixty minims of a 6 per cent. solution being used. The patient felt no pain, but became blind, talking rapidly and somewhat incoherently. The blindness lasted four hours, but she recovered completely.—Dr. CLIFFORD ALLBUTT said he had experienced after the use of cocaine symptoms which had been recorded by others—viz., dreams in which writhing worms formed the principal object.—Mr. HEWETSON said that in using cocaine for ophthalmic purposes corneal opacities were apt to be left if a mercurial antiseptic were used.—Mr. OAKELEY had seen bad effects from strong solutions, but found that the desired effect could be produced with a maximum of thirty minims of a 4 per cent. solution. He had found amylic nitrite very useful as an antidote.—Mr. MAYO ROBSON had had two cases only out of a large number which had caused him any anxiety—viz., one in which severe syncope followed an operation for circumcision, and another where aphasia, lasting four hours, followed the removal of a nasal polypus.

Mr. LAWFORD KNAGGS showed a patient on whom Abdominal Section had been performed. The case was found to be one of tubercular peritonitis, and the patient had completely recovered.

Last days of a case of Graves' Disease.—Dr. CLIFFORD ALLBUTT was called to a case of a lady almost moribund, with symptoms of failing heart. There was dropsy, congestion of lungs, orthopnœa, &c. The heart's action was quick, but there was no detectable valvular lesion, the action being most like that noticed in a case of Graves' disease. Inquiry showed that there had been both enlargement of the thyroid and great exophthalmos in the past, but these had disappeared two years before.

Syphilitic Coma.—Dr. ALLBUTT referred to a paper by Dr. Althaus on syphilitic coma, and described the case of a lady of fifty, who had had repeated attacks (seven or eight) of coma, lasting from two to five days, on two or three occasions accompanied by slight hemiplegia, but with perfect recovery. He regarded this as due to syphilis, of which there was good evidence in this case, and potassium iodide had been of great use in the treatment.

Acute Atrophy of Liver.—Dr. HUTCHINSON showed a liver with microscopical sections. There was jaundice for nine days before death, and there was some cirrhotic change, as well as the indications of atrophy.

Mr. LITTLEWOOD showed fresh cut sections of an Alveolar Sarcoma from the back of the Sacrum.

Dr. JACOB showed microscopic sections of a "Duct" Cancer of the Breast, from a case under the care of Mr. T. P. Teale.

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

THE sixth meeting of the session was held in the Faculty Hall, St. Vincent-street, on March 23rd.

Dr. MURDOCH CAMERON showed a Cervix Uteri amputated by Prof. Leishman for elongation in a nullipara, and advocated the use of the galvanic écraseur in such cases.

Mr. J. S. NAIRNE exhibited two simple forms of Wire Clamp, and Dr. SMITH exhibited Cones of Cocaine and Boric Acid, recommended by Dr. E. Head Moore for use in primiparæ and cases of rigid os.

The President, Dr. Sloan, then showed the Spleen and Uterus and Appendages of a primiparæ, aged twenty-two, who had died in the Maternity on the twenty-second day post partum, after a somewhat unusual illness. The specimens had been kept in spirit. The spleen had been adherent, and on removing it a quantity of grumous material had escaped from a cavity in the upper extremity. In this region it separated in two parts, joined by a mass of tough fibrinous material, its surface being coated with lymph. Otherwise the tissue was friable, and Dr. Dalziel had reckoned that the rupture indicated by these appearances must have taken place from three to four weeks prior to death. There was no appearance of pus in or around the organ. The uterus measured four inches and a half in length, and with its appendages looked quite normal, being covered with smooth and glistening peritoneum, and showing no trace of pus or putrefaction. There were no appearances elsewhere of septicæmia or pyæmia. Though the urine was one-third albuminous, the kidneys were found healthy post mortem.

Reviews and Notices of Books.

Recent Essays by various Authors on Bacteria in relation to Disease. Selected and edited by W. WATSON CHEYNE, M.B., F.R.C.S. London: New Sydenham Society. 1886.

Les Bactéries, et leur Rôle dans l'Anatomie et l'Histologie Pathologiques des Maladies Infectieuses. Par A. V. CORNIL et V. BABES. Deuxième Édition. Paris: Felix Alcan. 1886.

THE New Sydenham Society, which has done not a little to familiarise the English practitioner with the best writings of foreign scientists, has seldom accomplished better work than in undertaking the collection of monographs included in the volume edited by Mr. Watson Cheyne, in which, after a very interesting and suggestive introduction, we have, gathered from various sources and translated by capable hands, some of the best bacteriological work of the day. It is a great advantage to have access to such notable essays as that of Koch on Tuberculosis, Fehleisen on Erysipelas, Friedländer on Pneumonia, and Israel on Actinomycosis; and these only form a small portion of the rich contents of the volume. Dr. Koch's paper on the Investigation of Pathogenic Organisms, translated by Mr. Horsley, fitly introduces the volume. It is characterised by the clear and definite phraseology which has done so much to add to the charm of its author's expositions. His far-famed monograph on the Etiology of Tuberculosis, for the translation of which Mr. Stanley Boyd is responsible, comes next. No one can read this without becoming convinced of the truth of a discovery which aptly came to crown the labours of pathologists upon the nature of tubercle. "Seldom in the course of my life," wrote Cohnheim, "have I received such glad tidings," when the news of Koch's discovery of the bacillus tuberculosis reached him. On the additional light which such a discovery has shed upon specific diseases and inflammations there is no need now to dwell. One of the most interesting monographs—to English readers—is that by Dr. Gaffky upon the Etiology of Enteric Fever, which is translated by Dr. J. J. Pringle. Gaffky's researches were confirmatory of Eberth's discovery of a special bacillus in the intestinal lesions as well as in other organs. This bacillus is about one-third the diameter of a red corpuscle in length and three times as broad as long, and is distinguished from other bacteria by its power of spontaneous movement, its slight affinity for aniline dyes, the non-liquefaction of gelatine inoculated with it, the characteristic colonies it forms when grown on potato or solid blood-serum, and the spore formation at the extremities of the bacillus. The failure to produce inoculation of animals does not tell so strongly against its pathogenic character as might be supposed; and, as pointed out by Gaffky, there is as much reason for regarding it as the specific agent as there is in the case of the spirochœte of relapsing fever or the bacillus of leprosy. Fehleisen's memoir on Erysipelas is translated by Dr. Leslie Ogilvie. It is admirable for the clearness of its reasoning, and for the light it sheds upon the nature of erysipelas, as distinguished from other forms of dermatitis and cellulitis. The specific nature of the micrococcus discovered by Fehleisen is attested by the crucial experiments on human subjects, who were inoculated with cultures for the therapeutic purpose of causing the absorption of new growths through the action of erysipelas. Friedländer's paper on the Micrococci of Acute Pneumonia is translated by Edgar Thurston. The subject is one which has been further investigated since this discovery was announced, and the precise significance of the pneumonococcus is still *sub judice:* yet there can be little doubt as to the characteristic morphology and mode of growth of this remarkable microbe. Amongst other papers included in this collection we are glad to see that of Dr. Koch upon the Etiology of Cholera (translated by Dr. G. Laycock). The comma bacillus may or may not be the cause of cholera, but in the history of that disease the researches conducted by Koch which resulted in the discovery of that micro-organism will always hold a prominent place. Mr. Watson Cheyne supplies valuable abstracts and translations of writings upon Traumatic Infective Diseases, notably those of Rosenbach, in which the determination of the part played by the two varieties of staphylococcus pyogenes was first clearly established. Dr. Loeffler's paper on Diphtheria in Man—of which an abstract is furnished by Dr. T. Whiteside Hime,—although suggestive and interesting, proves how difficult it is to arrive at a definite conclusion upon the etiology of this disease. In some cases the specific organism seems to be a streptococcus, in others a bacillus; whilst perhaps the most important idea gained from the study is that primarily the disease is a local one. Dr. Hime also supplies an abstract of Israel's well-known paper on Actinomycosis in Man—another of the real additions to pathological knowledge for which science is indebted to the bacteriologist. Other papers in the volume are those by Neisser on the Bacilli of Leprosy, translated by Dr. Thin; by Loeffler and Schütz on the Bacillus of Glanders, translated by Dr. G. Ogilvie; several papers by Koch and others on Disinfection, abstracted by Dr. Whitelegge; and last in order, but not in importance, a very valuable abstract by Dr. Dawson Williams of the work done, largely by Pasteur and his pupils, upon the Attenuation of Virus and Protective Inoculation. The volume, as we have said, is of great value, and it only remains to congratulate the various contributors on the manner in which they have performed their several tasks.

It says much for the prevalent pursuit of bacteriology that the standard work of Cornil and Babes should have attained to the honour of a second edition within twelve months of its first appearance. It is evidence also of the high value set upon the work itself, for undoubtedly it deserves to rank as the leading treatise on the subject. Its

authors have a great reputation, and they have amply maintained it in this work, which contains not only their personal researches, but a carefully digested account of all that has been done in this wide field. So rapidly is progress being made that, as they truly remark, books on bacteriology soon fall out of date, and certainly they seem to have spared no pains to keep their volume up to present knowledge. Although so much has been accomplished, MM. Cornil and Babes point out how much more there is yet to do, both in the direction of the discovery of micro-organisms in certain specific diseases, and in the verification of discoveries alleged to have been made in others. Bacterial research has gone far to banish the doctrine of the spontaneous origin of specific disease, and to establish the specific nature of other affections; whilst the more knowledge that is gained concerning the nature and mode of action of these minute parasites, the more is the field open for successful prophylaxis. The work is divided into three parts, the first containing chapters on the methods of investigation and experiment, as well as a description of the varieties of bacteria, and the doctrine of ptomaines. The second part is devoted to acute infectious diseases attributable to the intervention of bacterial organisms, those limited to animals being first discussed; then traumatic infective diseases, pneumonia, diphtheria, typhoid fever, relapsing fever, intermittent fever, cholera, anthrax, variola, scarlatina, &c. The third part treats of chronic bacterial diseases, such as rhinoscleroma, tuberculosis, leprosy, and syphilis, a description of M. Pasteur's labours in hydrophobia being appended. This mere enumeration can, however, give no adequate notion of the special excellence of the work. The pathology of each disease, and particularly its pathological histology, is amply discussed side by side with the description of the specific microbe to which it is attributed: and all that can be done by a liberal use of illustrations, mostly coloured, is given. We must be content here with simply welcoming the work, and expressing a very strong opinion of its value.

Health at School, considered in its Mental, Moral, and Physical Aspects. By CLEMENT DUKES, M.D. Lond. Pp. 324. London: Cassell and Co. 1887.

THIS book, which is an expansion of the article on Health at School contributed by the author to Mr. M. Morris's "Book of Health," appears to us to supply a want which has been long felt; for although there have been many works on different matters connected with school health, we do not know of any one which has gone so exhaustively into the whole subject. It contains matter which deserves the careful study of parents, head masters, house masters, and form masters alike. In the selection by parents of a suitable school for their boys, its healthy situation, its sanitary condition, its adaptation to the capability of the boy, the character and traditions of the school, the qualities of the head master, and still more of the house master under whose care they are to be placed, are all matters demanding the most serious consideration. But parents must not forget how much depends upon themselves in the formation of the character of their boys before they attain the age at which it is usual to send them to school. It is their special duty to see that habits of truthfulness, honour, and uprightness are formed in the earliest years—really before school-days commence,—as it is almost impossible to form such habits afterwards. The sanitary construction of the school and of the master's boarding-houses is clearly set out and strongly dwelt upon; the means of preserving the health of the boys by attention to their diet, their school work, and their play, are all matters which require the constant supervision of the masters. On the subject of overwork, which has of late been much discussed, Dr. Dukes' remarks are excellent. He points out how clearly the amount of work which can be safely done depends, in a great measure, on collateral circumstances—the age and health of the boy, the conditions under which he works, as regards food, sanitation, exercise, and a judicious arrangement of the work; while he does not forget to inculcate the necessity for care and judgment to prevent shamming, and to avoid attributing to overwork conditions which are due to other causes. "Thus, headaches are sometimes caused by working or sleeping in impure or prebreathed air; often through a failure in sight, which could be, and should be, rectified at once by appropriate spectacles; and most frequently of all, these headaches are toxæmic, from imperfect action of some of the secretions, such as constipation, but especially would I mention albuminuria. On several occasions I have seen boys who had all the symptoms of overwork, and from whom no further work could be obtained, cured of all head symptoms, as soon as the cause was discovered, by an aperient and a milk diet only for twenty-four hours."

The chapter on Illness is one of great importance, as it discusses the medical arrangements for the treatment of disease and the isolation of infectious, and thorough quarantine of doubtful, cases until their exact nature has been determined. The steps which ought to be taken to prevent, as far as possible, the introduction of disease into school, and its spread if a case unfortunately should occur, and the measures incumbent on the school authorities to prevent infectious disease being carried home from school are very well laid down, and, if adopted, cannot fail to exercise a most beneficial influence in preventing the spread of disease, which is only too common from neglect of these precautions. Dr. Dukes gives tables of the period of incubation of various infectious diseases, and the probable duration of infection where efficient disinfection is in force and where it is not in force. These will prove useful to parents and masters in carrying out a system of protection for the boys under their care. He has also suggested forms of certificates to be used in cases of boys coming from homes in which there has been infectious disease, and of those returning to their homes from school under similar circumstances. We commend the study of this chapter to all who have any control over or are responsible for the welfare of schoolboys.

The book has been evidently prepared with great care, and shows a practical knowledge on the part of the author of the subjects of which he treats. We cannot recommend it too highly to the head masters and governing bodies of public schools, and to all who are interested in the welfare of the rising generation. Should it reach a second edition, we trust that the author will not omit to add to its practical value by preparing a copious index, so as to facilitate reference to any of the special points in it on which information may be desired.

OUR LIBRARY TABLE.

Some Phases of Cerebral Syphilis. By J. ALTHAUS, M.D. London: Longmans and Co. 1887.—This small volume of fifty-five pages is the substance of an address delivered before the New York Academy of Medicine, on Oct. 7th, 1886. It is chiefly interesting from the accounts given of syphilitic coma and hemiplegia; the former state, we agree with the author, has not received sufficient recognition from the general members of the profession. Dr. Althaus summarises his own experience of eight cases. They all occurred in males between twenty-five and forty-two years of age. A definite history of primary and secondary syphilis was obtained in all. In one case the coma appeared eight months after infection, in six between three and five years, and in one case seventeen years afterwards. In two cases no other cerebral symptoms had occurred before the coma,

while six of the patients had at various time suffered from giddiness, epileptiform convulsions, and transient loss of power in the limbs. The author compares "syphilitic coma" with diabetic, alcoholic, and other causes of coma, and also analyses the progress of the clinical course.

First Year of Scientific Knowledge. By PAUL BERT. Translated by JOSEPHINE CLAYTON (Madame PAUL BERT). Third Edition. Pp. 343. London: Relfe Brothers. 1886.—We read in the preface: "This little work is so popular in France that in three years 500,000 copies have been sold, and there is scarcely a school, even in the smallest village, that does not use it"—a sufficient evidence of the value of the work. It may be considered as drawn up on nearly the same lines as the Primers that were published some years ago in this country by Messrs. Macmillan, by Professors Hooker and Michael Foster, and others, except that it is abundantly illustrated, and that there is a mixture of question and answer. The subjects dealt with are, in order—Zoology, Botany, Mineralogy, Physics, Mechanics, Chemistry, and Physiology, both Animal and Vegetable. These subjects are treated in a very simple manner, and the book might well be introduced into many of our elementary schools.

1. *Guy's Hospital: Instructions for Case-taking in the Medical Wards.* 2. *Method of Case Reporting for Clinical Clerks.* By T. CHURTON, M.D.—The importance of enforcing a systematic method in the examination and record of clinical cases is fully recognised at the present day. Most manuals of practical medicine contain instructions on the lines to be pursued in such investigations, which are essential to the art of diagnosis; and the multiplication of diagnostic aids renders the need of definite rules more necessary. The "instructions," which have been in use at Guy's Hospital for some years past, are particularly useful; whilst Dr. Churton's scheme is perhaps somewhat more elaborate. In the former there is more explanation given than in the latter. The clinical clerk who will conscientiously work out his cases according to such methods as either of these points out will not only render his records of greater value, but will vastly assist himself in his own studies, and lay the foundation for accuracy and breadth of view in dealing with disease.

Elementary Animal Physiology. By GEORGE A. BUCKMASTER. Fifth Edition. Pp. 203. London: Moffatt and Paige.—This little work has been written up to the requirements of the Science and Art Department of the South Kensington Museum, the syllabus to which is placed at the head of the first chapter. Mr. Buckmaster states that the present edition has been completely rewritten, and care has been taken, in consideration of those for whom it is chiefly intended, to introduce only well-ascertained facts. He recommends the teacher to show to his class the structure and position of the organs which are the objects of his instruction. The book gives a fair exposition, in simple and easily understood language, of the main facts in anatomy and physiology, and supplies just such information as a teacher, armed with the certificate of the Science and Art Department of South Kensington, ought to know and to be able to communicate. The illustrations are sufficiently numerous and good.

Christian Theocracy and the Dynamics of Modern Government. A Dialogue for the Times. Edinburgh: Maclachlan and Stewart. London: Simpkin and Marshall.—This is to a large extent a psychological work, and as such will interest many of our readers. It consists of a dialogue in verse, between Physicus, a "thoughtful materialist," and Psychicus, an "enlightened supernaturalist." The work as a whole may be said to consist of an effort to reconcile the views of scientific and religious thinkers respectively in their bearing upon social and political questions. Its argument, if sometimes lengthy, is for the most part skilfully presented, and is not wanting in originality of sentiment, while its diction as a rule is correct and graceful. As usually happens in such cases, neither disputant convinces the other, but there is material enough for the reflection of a third party in the utterances of each. The expression of modern sentiments in a somewhat archaic style, and a vagueness of meaning which appears at times to darken the mystery natural to this subject, are blemishes which might with advantage be removed in a new edition. Apart from these shortcomings, there is much that is fresh and ingenious in reasoning in this latest addition to speculative literature.

Wear and Tear. By S. WEIR MITCHELL, M.D.—This thoroughly revised fifth edition of an essay that originally appeared in *Lippincott's Magazine* is a most charming and thoughtful piece of work. One does not know which most to admire—the style, the matter, or the logic. Such happy combinations are of rare occurrence. This new edition comes opportunely when so much is urged on behalf of the higher culture of women. "It were better not to educate girls at all between the ages of fourteen and eighteen unless it can be done with careful reference to their bodily health." Everyone should read this *brochure*.

The Birmingham Medical Review. March, 1887.—This monthly journal is certainly one of the best of our provincial periodicals. The practitioner must find the Retrospect a very valuable feature. Dr. Suckling supplies the abstracts on Nervous Diseases; Mr. Wood White, those on the Diseases of the Eyes; Dr. Bostock Hill, those on Hygiene; and Dr. Arthur Foxwell, one of the editors, those on Therapeutics.

A Descriptive List of Anthropometric Apparatus. Published by the Cambridge Scientific Instrument Company. 1887.—This little pamphlet contains an account of the various instruments for measuring and testing the chief physical characteristics of the human body. The instruments have been designed under the direction of Mr. Francis Galton, and include dynamometers, instruments for testing height, weight, keenness of the senses, and the like.

Dod's Parliamentary Companion. London: Whittaker and Co.—In consequence of a special edition of this volume being necessitated by the early dissolution of the last Parliament and published during the autumn of last year, the issue of the new edition for 1887 has been delayed until a few days ago. The additional information which has, however, been included in the current issue fully justifies the delay. The work is now in its fifty-fifth year, the volume under notice being the sixty-first issue, and may with advantage be consulted by those desirous of obtaining succinct information respecting the hereditary and elected representatives of the nation.

UNIVERSITY OF DUBLIN MEDICAL SCHOOL.—At the prize examinations for the session 1886-87, the following were successful:—Practice of Medicine: First prize, James Magauran; second prize, William McNeely Wilson. Midwifery: First prize, Charles Fitzmaurice Harkin; second prize, Alan E. Mahood. Anatomy: Senior Division—First-class honours, Alan Mahood (prizeman), A. E. Barrington, Edward Cuffey (equal), Robert Heard, E. R. E. Ivatts, W. J. Haslitt, F. P. Nowlan, and R. L. Whitty; second-class honours, V. L. Jones, C. M. McLaughlin, W. Burkitt, and W. A. Isaac. Second Years' Division—First-class honours, R. A. Yeates, Thomas North (equal), and J. H. Head; second-class honours, T. Tate, T. Gordon, F. Myles, J. Cook, R. Dowdall, and J. Kilgariff. (The prize was awarded to R. A. Yeates, after a special examination.) Junior Division—First-class honours, D. Corrigan (prizeman), W. Dawson, T. Miles, J. Heron, E. Taylor, and V. Rutledge; second-class honours, P. Kilkelly, E. Seale, A. Adair, R. Going, H. Earl, J. Graham, E. Brook, G. Donaldson, and P. Walker.

New Inventions.

A SCISSORS-CLAMP FOR EXTERNAL HÆMORRHOIDS OR OTHER SMALL TUMOURS.

IT has long been the aim of surgeons to devise an instrument that would cut and clamp by the one single movement of the finger and thumb. Such an instrument I have endeavoured to place before the medical profession. Its action is self-evident, and requires no explanation. The simplicity of the instrument at once strikes the observer; nevertheless, it has taken eight months' hard working out. The great difficulty found in practice was to get the clamp to work and clamp throughout its entire length before the

scissors-blades began to move. With the instrument as it now is this has been accomplished, the clamp being firmly closed before the blades of the scissors begin to move. Anyone requiring it can have a rack fixed on the handles, so as to fix the clamp action without holding the instrument. It has been made for me by Messrs. Maw, Son, and Thompson, Aldersgate-street, London. The instrument is elegant in form, light in weight, and very powerful.

Portland House, Cheltenham. FRED. A. A. SMITH, M.D., C.M.

A NEW FORM OF TOOTH-BRUSH.

WE have received a "three-sided tooth-brush" from Mr. Wall of Dublin, which he has invented to enable the molars and bicuspids, being the teeth most generally neglected, to be more easily cleaned. The name is rather misleading, as the hairs are arranged on one side only, as is

usual, but the free surface of the brush is deeply concave, so that the crowns and sides of the teeth are cleaned at the same time. It does its work efficiently; but, after all, more depends upon the manipulation than the form of brush used.

THE RUBBER STETHOSCOPE.

THIS is a very convenient and portable form of stethoscope, single or double, which has been produced and patented by Messrs. Arnold. It is made entirely of rubber, from ear-to chest-piece, and can be squeezed and even sat upon with impunity. It measures twenty inches in length, and is very flexible. It is therefore convenient for use where the shorter and stiffer instruments are inconvenient. It may fairly lay claim to being a handy, useful, portable stethoscope.

LIFE ASSSURANCE.

THE thirty-second annual meeting of the Whittington Life Assurance Company was held on the 28th ult., when the directors presented a report and accounts for the year 1886. By a special resolution the date up to which the accounts are made has been altered just now from May 1st to December 31st, so that practically the account now under notice is an eight months' account only. In that time the directors have received 506 insurance proposals, for the sum of £111,452. Of these 410 have been accepted, and policies have been issued for £80,213, producing an annual premium income of £2571. The number of proposals declined has been 28, for £8880; the remainder being still in abeyance. Ten annuities have also been granted for the sum of £199 14*s.* 4*d.* During the same period an agreement with the Emperor Life Office has resulted in the transfer of assurances which originally amounted to £192,866, but which under the terms of the agreement have been reduced to £142,485, for which last-named amount the Whittington has accepted liability. The net premium income of the year was £55,050, and the Assurance Fund at its close amounted to £145,532.

THE PATHOLOGY OF INEBRIETY.

THE annual meeting of the Society for the Study and Cure of Inebriety was held on the 29th ult. in the rooms of the Medical Society of London, Dr. Norman Kerr in the chair.

The President took for the subject of his address "The Pathology of Inebriety." The study was important, yet difficult; difficult because some diseases, such as certain forms of insanity, left no post-mortem traces. In the disease inebriety there was either structural degradation or functional disturbance, or both. There was a prior morbid state before the outbreak. Every sensation had a physical antecedent or coincident, normal in health, abnormal in disease. Dr. Kerr classed drinkers as (1) voluntary and (2) involuntary. Moderate drinkers belonged to the former as a rule. The latter comprised inebriates from heredity, traumatic inebriates, and inebriates from the direct or indirect effects of disease. Involuntary drinking was abnormal with a pathological antecedent. The transition from moderate to immoderate drinking was often a pathological process. The pathological antecedent might be exaltation or depression, or some other undefined morbid state. There was depression, for example, after exhausting hæmorrhage and in the crises of neurotics. Besides the pathology of the inebriate pre-paroxysmal physical antecedent, there was the pathology of the inebriate diathesis. Even in many cases of evanescent inebriety there was a diseased condition. The majority of drinkers did not respond to excitation to inebriate excess because they had no inebriate diathesis. Those who did so respond possessed this diathesis. The inebriate diathesis consisted in a deficient brain and nerve tonicity. The brain and higher nerve centres were the seat of inhibition, which power was affected by the physical state of brain and nerve; a brain imperfectly or improperly nourished heavily handicapped the power of control. This defective tonicity might be (1) inherited or (2) acquired, as also might special susceptibility to narcotics. The alcoholic was the most delicate transmitted narcotic susceptibility. The inebriate diathesis might be (*a*) latent or (*b*) developed. Alcohol was an effectual weakener of control, and specially injured brain and nerve cell, thereby being hurtful to intellect, thought, and *morale*. The pathological action on brain and nerve was often accompanied by other bodily pathological changes. Abnormal nutrition initiated these pathological alterations. By a pathological process alcohol begat inebriety. After a fatal paroxysm the post-mortem appearances were hyperæmic, involving specially the stomach, cerebrum, and meninges. Sometimes this extended to the liver, kidneys, heart, and respiratory organs. In old-standing cases these lesions were more serious, with neuroglian proliferation and tortuous atheromatous vessels. Dr. Kerr concluded by pointing out that in many cases where there were no special post-mortem appearances, there had been dynamical and psychical brain disturbances, constituting a true departure from sound health. Only by a recognition of its disease-aspect could inebriety be intelligently treated with a fair prospect of cure.

THE LANCET.

LONDON: SATURDAY, APRIL 16, 1887.

THERE is a great tendency in the mind of everyone to magnify the importance of the work in which he is engaged, and to seek better methods or further powers for its execution. It is by such efforts that improvement is made, for by constant perseverance the worker succeeds in carrying with him the greater number who know or care little about the subject matter which their more enthusiastic fellow-citizen has taken in hand. We can, therefore, fully sympathise with a desire to see perfection attained, and certainly no one who has any experience of the ill-health which can be produced by ill-constructed houses will hesitate to welcome any well-directed effort made to bring about the changes which increasing knowledge has shown to be necessary, and especially when evils are being perpetuated more on account of the want of appreciation of that knowledge at its proper value than for any other reason. When, however, it is proposed to embody in compulsory legislation for the many the principles which have been accepted by the few, it is time to consider how far the proposal is calculated to effect improvement, and whether the cost and the means to be adopted for this improvement are such as to meet with general approval.

Two Bills have during this session been brought before Parliament relating to the drainage of houses and public buildings. It is not at first obvious why other parts of house-construction, which certainly are as intimately associated with health, are not deemed worthy of similar treatment; but as matter of fact they are omitted from consideration. The reason for drainage being held to be of such pre-eminent importance is probably due to the circumstance that a large number of people are now employed in the reconstruction of house drains and their fittings while as yet no such attention has been devoted to the other conditions to which we refer. As a result, the use of the word "sanitary" is being limited, very improperly, to matters which relate to drains, and we not only hear of sanitary surveyors as a class of persons who devote their attention especially to drainage, but we have a Sanitation of Houses Bill dealing solely with this subject. The authors of this Bill are evidently dissatisfied with the manner in which house drainage is constructed in the metropolis, and feel there is little hope of improvement from the local authorities, who have since 1855 very generally neglected to exercise in the best way the powers with which from that year they have been endowed, they therefore propose to constitute an entirely new authority to take over the duties which have remained unfulfilled. The Bill unfortunately, in its inception departs from those principles which are the foundation of all modern legislation, and therefore has small prospect of becoming embodied in the Statute-book. However right may be the views held by certain professional associations, it is not probable that the Legislature will empower them, as the Bill provides, to elect the members of an authority authorised to enforce these views upon all London house-owners. The proposal to place all houses under the control of a dozen men elected in this manner is, indeed, evidently the suggestion of amateurs.

The second Bill is more modest in its ambition, inasmuch as it proposes to limit itself to dealing with buildings of a quasi-public character, such as schools, hospitals, hotels, and lodging-houses, but the area of its jurisdiction is to be wider and is to extend to all towns of 2000 inhabitants and upwards. The Local Government Board are to be an authority for the issue of licences in sanitary practice to certain persons and corporations, and for the most part are to grant these upon the certificates of a governing body to be elected in the same manner as in the other Bill. Existing local authorities are under this Sanitary Registration Bill to be permitted to have some share in this comprehensive work, for they are to open a register for all buildings which receive certificates from the licentiates, and are to prosecute the owners, lessees, and occupiers of those buildings which have not received this evidence of the perfection of their drainage. But this certificate is not to remain in force for more than five years, and the same process will therefore be repeated at the end of this period.

There is much to be said in favour of the principles of drainage which are embodied in these measures. Speaking generally, they are those recognised in the model bye-laws of the Local Government Board. When, however, it is recollected that under the Metropolis Local Management Act and the Public Health Act there is already ample machinery for bringing about, both in the metropolis and in the provinces, the ends which the promoters of these measures have in view, it may well be asked, What is the need for further legislation? The answer is doubtless to be found in the fact that the local authorities have to a considerable extent neglected to exercise these powers. This accusation is, we believe, well founded, but the remedy suggested is impossible. What is possible, however, is for the supporters of these Bills to influence the authorities, and by joining them and taking share in their proceedings they would inevitably bring about the more effectual local supervision which is required. Nor need their influence be limited to drainage alone; there are other important questions of local government not less seriously neglected, and the best results would follow if skilled members of the professional classes thus made their special knowledge a guiding power in matters which closely concern the health and prosperity of communities.

THE subject selected for treatment by the Croonian lecturer of this year is one of abiding interest; and he deserves thanks for doing much to widen and deepen that interest. The study of the pulse and its indications is, indeed, as ancient as the medical art itself; and one has only to turn to the writings of HIPPOCRATES to learn how closely and how accurately its variations were observed, with much remarkable result in prognosis and treatment. For, however faulty may have been the ideas concerning the nature of the pulse that have prevailed from the days of HIPPOCRATES almost until now, no one can venture to dispute the accuracy of observations and the sagacity in clinical interpretation that

have gathered around this subject. With the rise and progress of physiology there seemed to be a fear lest we should set at nought the old teachings and neglect too much the time-honoured practice of feeling the pulse. Nor was it without reason that the lament arose that the rising generations of practitioners were neglecting the old ways, and relying more upon instrumental aids than on the *tactus eruditus*. To feel the pulse was in danger of becoming a merely ceremonial act; and the reading of the sphygmographic tracing was held of greater import than the reading of the lessons of the finger. Not that we believe this lament to have been ever justified, or that mechanical apparatus, however cunningly devised, can equal in delicacy the educated tactile sense. There was never any real danger of converting our clinical records into a series of observations in which the observer only played the part of a skilled mechanic. Yet it is well to be reminded that the pulse is to be read with greater accuracy and certainty by the old method than by the use of the instrument which we owe to the genius of MAREY. The sphygmograph has done a great deal to interpret the significance of the pulse, and advance our knowledge of the circulation in health and disease; but as a means of clinical observation, as an aid in diagnosis, its place is necessarily subordinate to the older practice. This Dr. BROADBENT did well to state, and also to dismiss, once and for all, the pretensions to a precision which the sphygmograph cannot claim. No doubt much of the attraction that the study of the pulse had for our fathers lay in the mystery that invested it; and the care with which they separated its varieties, and allied them to differences in temperament and habit, as well as employed them in prognosis and diagnosis, was more or less influenced by the superstitious reverence in which it was held. Nor did the discovery of the circulation, the starting-point of physiology as a science, go far to dispel the glamour that invested the subject, and the true nature of the pulse remained more or less concealed. Dr. BROADBENT, therefore, did well at the outset to clear the matter of its surrounding misconceptions by laying stress on the fact that the pulse felt by the finger as it depresses the artery against a resisting surface is the sign of the momentary heightening of the blood pressure due to the impact of the ventricular systole. It cannot of course be denied that the vessel is distended at the moment of its receiving this impact; but it is not dilated. It is not in healthy conditions disturbed from its bed. Nor does it indicate the actual movement of the blood column. It is a physiological truism that the rate of the (so-called) pulse wave is wholly different from the rate of the blood current; whilst if the current be checked the pulse grows in vigour. The pulse, then, thus simply interpreted, gives information mainly upon one of the chief factors in the circulation; it indicates changes in the degree and duration of arterial blood pressure, besides informing us of the rate of the cardiac contractions, which are also often dependent upon changes in that pressure. By observation of the pulse we determine the condition of the circulation; we infer from its indications the character of the circulation in the periphery, as well as the vigour of the heart; we can learn the condition of the arterial system; and, finally, base upon physiological grounds the evidences of derangement in the circulation thus derived.

No more can be claimed for the pulse than that it is the best index we have of the condition of the circulation in the human subject, and the more the sense of touch is educated to detect the variations in the pulse, the more accurate will be our perception of this condition. The Croonian lectures have introduced us to this subject, with ample illustrations drawn from a wide clinical experience; and yet, if they have done good service in directing attention to the relations between conditions of circulation and disease, they have equally left open many paths for further exploration. Dr. BROADBENT has no hesitation in dispelling a delusion which is as old as the art of feeling the pulse. He declares that he has been unable to associate any condition of pulse, as regards low or high tension, with any special vigour of body or mind or any peculiarities of temperament. Persons with a pulse of low tension may perhaps, he tells us, be longer lived; they may not wear out so rapidly; but, if better able to endure the stress of life, they are less capable of withstanding the onset of acute disease. In the presence of such considerations and of individual differences, it would, then, seem to be hopeless to create a criterion or a standard of health from the condition of the circulation alone, in spite of all *a priori* notions to the contrary. When, then, we learn, as in the very interesting lecture that closed the series, that certain nervous derangements—notably insomnia, convulsions, and melancholia—are referable to circulatory disorder, we may fain ask whether this latter is sufficient by itself to produce these effects. As regards insomnia, the evidence adduced by Dr. BROADBENT would seem to be all-sufficient, and his very practical suggestions upon the different forms of insomnia associated with pulses of high and low tension respectively will be appreciated. As to convulsions, and their assumed induction from changes in the intra-cranial pressure due to changes in arterial pressure, it requires something more than the latter to account for the phenomenon. We admit the strength of the evidence adduced in support, especially that afforded by the arrest of the convulsions on reducing the blood pressure by bleeding; but the circulatory condition is one so common, apart from these nerve symptoms, that we must assume superadded instability of nerve tissue in all such cases, whether uræmic or otherwise. The same applies to the argument respecting melancholia, by which we gather that Dr. BROADBENT would infer that the long continuance of heightened blood tension leading to vascular changes will ultimately affect the nutrition of the brain and degrade its tissue. That calomel should purge the soul of melancholy is an interesting, if ancient, fact; but that the whole of its explanation lies in the reduction of the arterial tension, or that changes in the arterial tension are alone adequate to explain the cerebral state, are subjects which may well be further investigated. This is but one instance of the points raised in these lectures. We must refer to the text for the careful expositions, with a wealth of clinical illustration, of the variations in the pulse; the conditions of low tension and high tension, and their significance; the bigeminal pulse, and its relation to the infrequent pulse, in which only one out of every two cardiac beats succeeds in reaching the wrist; the conditions of irregularity and intermittence, of dicrotism and of abnormal frequency, especially some remarkable neurotic conditions described.

These topics were dealt with in a manner which is sure to attract attention, and cannot fail to render great service to clinical medicine by enforcing greater precision in observation and supplying fresh material for thought.

THE excellent abstracts of English and foreign chemical research which appear every month in the Journal of the Chemical Society of London render it an easy task to trace the progress which physiological chemistry is making. Nothing very remarkable has appeared for some time, but there is a constant influx of new and careful observations, valuable in themselves, and still more valuable as supplying material for new generalisations. England's share in the work is unfortunately but small. We have a few good workers, but Germany beats all other nations put together in her industry in this branch of inquiry. We cannot pretend to summarise all the discoveries of the last few months, but a short account of a few will be interesting to those who have not time to read the journals in which they have appeared.

J. SEEGEN, in *Pflüger's Archiv*, has contributed some interesting experiments on the relations of sugar in the organism. Confirming and extending his previous observations, he finds that with any diet and even during inanition the liver forms sugar, probably from peptone. The quantity of sugar is doubled during the passage of blood through the liver. In a dog weighing 10 kilogrammes the quantity of sugar formed in twenty-four hours was not less than 200 grammes. With an almost exclusively fat diet this quantity continued, and as the quantity of nitrogen excreted was only 15 grammes the sugar could not have been due to the decomposition of proteïds. In a second paper the author shows that the liver is capable of converting not only fat, but each of the proximate constituents of fat, the fatty acids and glycerine, into sugar. This is very important indeed. In the same number which records the last observation F. RÖHMANN states that ammonia, as well as its derivatives asparagine and glycocol, increase remarkably the quantity of glycogen formed in the liver. The true relation of glycogen to sugar in the liver seems still a little uncertain. Is glycogen always formed first, and is the sugar found in hepatic blood formed by the continual metamorphosis of glycogen? That seems the most probable view. SEEGEN, on the other hand, from experiments on the action of defibrinated blood and peptone on fresh liver, concludes that sugar is formed directly from fat and from albumen, but not from glycogen. In that case what becomes of the glycogen? Some interesting researches on the subject—which, however, do not appear final—were contributed to a recent number of the *Comptes Rendus* by CHAUVEAU and KAUFMANN. They confirm the statement that glycogen accumulates in the muscles during rest, but diminishes during motion. It will be remembered that, on the other hand, lactic acid increases during exercise. Glycogen, according to the last-named observer, is a storehouse of energy available at any minute for increased work.

Some interesting studies of the ptomaines, so important from the toxicological point of view, have lately been made. One of great practical value appeared in our present volume. Mr. FIRTH (THE LANCET, 1887, vol. i., p. 213), tracing the origin of an epidemic of purging and vomiting among soldiers in the Punjaub, obtained from some suspected milk which had been kept in foul pans a crystalline substance of unpleasant odour and taste which communicated similar symptoms to men and dogs. Pure milk after standing for two months yielded the same substance. In the *Chemisches Centralblatt* of last year (p. 647) appeared a paper by C. GRAM, in which some light is afforded in regard to the difficult question why some of the so-called ptomaines are poisonous while others are not. Ptomaines were obtained from putrid meat easily enough, and proved inert. But when the hydrochlorates and lactates of these bases were exposed to heat, the former remained inert, while the latter developed distinctly poisonous properties. This seems to illustrate the ready formation of poisonous ptomaines from milk. The author then proceeded to test the theory which has been started—that the active poison of ptomaine is isocholine or neurine, the isomeric variety of choline. By heating the lactate of choline, itself inert he obtained a poisonous substance similar, at any rate to a poisonous ptomaine, and possessing the peculiar odour of muscarine, which is oxy-choline. BRIEGER (*Berichte* 19, p. 3119) describes a volatile alkaloid forming crystallisable salts, and having the formula $C_5H_{11}N$, which he obtained from beef extract in which Rosenbach's microbe had been cultivated. It is monobasic.

Of interest in another direction is an hypothesis on the origin of the free hydrochloric acid of the gastric juice propounded by LANDWEHR (*Chem. Cent.*, 1886, p. 484). It is well known that common salt is decomposed by free lactic acid. This takes place even in cold solutions, as may be shown by the addition of common salt to a solution of lactic acid coloured by methyl-violet. According to LANDWEHR, who has worked on the subject in conjunction with FICK, lactic acid is formed by fermentation from the mucus of the stomach, and, acting on alkaline chlorides, liberates hydrochloric acid, which in its turn acts on the albuminoids, combining with them. As peptonisation goes on, the hydrochloric acid is liberated, while the lactate of sodium is assimilated.

Another valuable research is that of R. KULZ on the gases of parotid saliva, which was published in PETTENKOFER and VOIT'S *Zeitschrift für Biologie*, pp. 23-321. Dr. HALLIBURTON'S able synopsis is only a little too long to be quoted entire, and we wish we could reprint it. Saliva was drawn by a cannula from Stenson's duct, and was collected over mercury. One hundred cubic centimetres gave 7 cc. of gas, of which 1 cc. was oxygen, 2·5 cc. nitrogen, and 3·5 cc. carbonic acid. Phosphoric acid caused the evolution of from 40 cc. to 60 cc. of carbonic acid present as carbonates in the saliva. It is noteworthy that the oxygen and nitrogen are higher than in blood-serum. The uniform alkalinity is due to the carbonates, and it is found that the secretion of gastric juice, which produces great variations in the acidity of the urine, even in some cases rendering it alkaline, does not affect the saliva. This is shown by direct filtration, and also by the estimation of combined carbonic acid.

Space forbids us to speak of some other recent contributions to physiological knowledge, but a word must be spared for H. STERN'S paper on the origin of the bile colouring matters (*Chem. Cent.*, 1886, p. 481). The experiments were made in two

series, in one of which the bile ducts were ligatured, and in the other the liver was thrown entirely out of the circulation. In neither case did blood, urine, or tissues show any trace of bile pigments, and the author concludes that these substances originate entirely in the liver itself.

AN influential party in the State has commenced an agitation as to the quality, or, as they put it, the purity, of the great national beverage, beer. It is alleged that beer is adulterated, not only in obvious defiance of the law by publicans, but also with the sanction or connivance of the law by many brewers. Beer, say the complainants, is a beverage made from malt, hops, yeast, and water. Anything else used in the manufacture is an adulteration, and is not only a fraud on the purchaser, who thinks he is buying malt-and-hop beer, but is also a possible and even probable injury to his health. These are serious allegations, and require most careful consideration. We will state our view of the case impartially, and shall at any rate be acquitted of sympathy with the baneful work of the adulterator.

First in the order of study comes the all-important question, What is beer? And the answer is by no means so easy as might be supposed. Beer, like wine, is of extreme and unknown antiquity. It was made by the Egyptians from barley, probably, as Herodotus asserts, because the vine did not flourish in Egypt. In some parts of Europe it took the place at a very early period of the mead made from honey which maddened the brains of more northern races. As far as malt goes, the definition of beer appears, therefore, at first glance simple enough. Taking our stand on ancient history, we may say that it is a liquid obtained by the fermentation of malt, or rather of the sweet wort obtained by the diastasic conversion of the starch of barley. But in the fermentation by which the alcoholic beverage known as beer is finally produced, the chief chemical change is the conversion of sugar into alcohol and carbonic acid; and other kinds of sugar besides the sugar of malt, now known as maltose and recognised as a distinct compound, are capable of yielding alcohol and carbonic acid by fermentation. For many years past the law has, rightly or wrongly, permitted the use of sugar in brewing, and it is very extensively employed at the present time. We have, therefore, in this as in all other cases of alleged adulteration, to inquire first, and above all, whether such a modification of the old brewing process is detrimental to health, and, secondly, whether it can be considered as a fraud upon the purchaser. We are unable to answer either of these questions in the affirmative. It has, indeed, been asserted that the products obtained in the fermentation of artificial glucose are cruder and more noxious than those derived from a natural sugar, such as the glucose of grapes or the maltose of wort. But, as far as we know, no definite proof of this assertion has been produced, and until it is forthcoming the assertion itself must be dismissed. The question of fraud is less simple, but the answer appears to us to be equally inevitable. If the Excise permit the use of any innocuous saccharine fluid in brewing, the public are thereby made aware of the fact. The demand for the beer so made will depend on its quality and its price, and on both these points the public are competent judges. The price will evidently be determined ultimately by the ordinary laws of competition. To put an extreme case, suppose that beer equal in quality to that supplied by the best-known brewers could be made for half the present cost, it cannot be doubted that those great firms would soon find themselves suffering from a competition which, although unpleasant for them, would be advantageous to the beer-loving public. If the cheap beer were inferior to that of the well-known makers, there would be, as there are now, plenty of people willing to give the higher price for the better article. But to prohibit the sale of cheap beer, unless on the ground that it was unwholesome, would be as absurd as to prohibit cheap claret or cheap tea. Of course, if the brewer or the publican sold such beer as made from malt and hops only, or, worse still, as that of well-known manufacturers, he would commit a fraud, as he would if he sold *vin ordinaire* as some celebrated vintage. But if he sells a pint of beer or a bottle of claret without further description, he commits no fraud. If the purchaser does not like it, he will go elsewhere, and the vendor will lose his customer and in time his trade.

The case of hops is still simpler. The hop-resin is a wholesome tonic bitter, but its use in brewing is, compared with the manufacture itself, quite a modern innovation. Nowadays we think it an improvement, as some may do a dash of chicory in coffee. The beer of to-day, even when made from malt and hops only, is a very different thing from the beer which washed down the breakfasts of our forefathers. Now and then in an old-fashioned inn we still meet with the "hard" or fully fermented ale which was formerly so much prized, but to most modern palates it is unpleasant. Surely no one would pretend that the brewer who left out hops altogether did not brew beer. The experience of thousands of years would contradict him. But the taste of the present time demands a bitter, and provided that the bitter be wholesome we do not see that it matters much which is used. If the brewer uses picric acid or strychnine or any other noxious substance, we have nothing but detestation for him—down with him by all means, and as soon as possible. But if he selects a perfectly harmless bitter, he has, we submit, a perfect right to do so. The beer will perhaps be nasty, but in that case the public will be no more willing to drink it than they would a decoction of senna. We have tasted beer made, we were told, without either malt or hops. It was interesting as an example of applied chemistry, but we experienced no desire to repeat the experiment.

The fact is, the cry about pure beer is but the despairing wail of the unfortunate agriculturists, for whom in their bad times everyone feels the deepest sympathy, but for whose misfortunes it is hard to find any remedy that would not be worse for the community than the disease. Simultaneously with the beer agitation, and illustrative of it, is the cry for an import duty on hops. It is not for us to discuss the vexed question of free trade *versus* protection, but it is obvious that hop-growers are not the only persons who suffer from free importation, and that if they were relieved by an import duty it is difficult to see where we could stop.

DR. BRUNTON has fulfilled the promise made in our columns that in the preface to the third edition of his well-known

work, "Pharmacology, Therapeutics, and Materia Medica," he would express his opinion regarding homœopathy in reply to the charge that he had taken many of his principal drugs from the Homœopathic Materia Medica, as well as the indications for their use. It is a favourite delusion of those who hold peculiar views that all other people's best ideas have their germ in what they think their peculiar property. The homœopaths have this delusion to a happy extent, and cultivate it diligently in their writings, though in their practice nowadays they are as little hindered as other practitioners by any exclusive principles or dogmas. Our simple object, however, just now is to give our readers the benefit of Dr. BRUNTON'S views on homœopathy as a system. First, and most pleasantly, let us record his admissions of the service it has done, though similar admissions have been made before. Dr. BRUNTON says the system which HAHNEMANN founded has done great service by teaching the curative power of unaided nature, the use of diet and regimen in treating disease, and the more than inutility—the actual hurtfulness—of powerful drugs in many instances. Dr. BRUNTON shows how homœopaths are led to be anxious about diet. "If," says he, "a patient was being treated with *carbo vegetabilis* in the thirtieth dilution, the utmost care was necessary to his diet, for if he happened to eat a single piece of burned toast at breakfast he would consume at one meal as much vegetable charcoal as would, when properly diluted, have served him for medicine during the remainder of his natural life." This is the only passage in which Dr. BRUNTON allows the ridiculous aspect of homœopathy to find full expression. We shall try to practise the same repression which he shows, and deal seriously with the claims of HAHNEMANN and his representatives.

First, Dr. BRUNTON very lucidly states what homœopathy is *not*; and, secondly, as lucidly states the very essence of the doctrine. One sentence on page xii. of the preface will give both points:—

"It is not the use of a single drug at a time, of a small dose, of a globule, nor even, as we have already seen, of a drug which may produce symptoms similar to those of the disease, that constitutes homœopathy. The essence of homœopathy as established by HAHNEMANN lies in the infinitesimal dose and the universal application of the rule *similia similibus curantur*."

The ordinary practitioner differs from the homœopathic in being free to use any drug which he knows to be of use in the case, and that in any quantity experience shows to be best. HAHNEMANN'S greatest delusion was that the causes of disease were not material but spiritual, and that medicines must be spiritualised to cope with them. Hence his infinitesimal doses. Fancy any of our best and most certainly remedial agents being used in this way and on this theory. When would ague be cured by quinine, or pemphigus by arsenic, or syphilis by mercury, if the spiritual theory of disease and drugs were adopted? Dr. BRUNTON says that HIPPOCRATES knew that in some instances a drug in small doses will cure a disease exhibiting symptoms similar to those produced by a large dose of the drug; but HIPPOCRATES had the sound sense to see, as some homœopaths have had the sense to see, that this was not a rule of invariable application; therefore not an invariable law, as HAHNEMANN taught.

Dr. BRUNTON deals with the favourite case of cinchona and ague, the action of which drug on the healthy frame, homœopaths are fond of saying, led HAHNEMANN to investigate the action of other drugs, and thus lay the foundation of his system. Dr. BRUNTON shows that, though HAHNEMANN got symptoms of intermittent fever from taking large doses of cinchona, they were probably produced by the irritant action of cinchona on the stomach, which JONG found to be produced by two-drachm doses, half the dose that HAHNEMANN took. He thinks that pork-pie might have had similar consequences, having often seen ague reproduced from heavy dinners and other stomach irritations. We are pretty familiar nowadays with the effects of large doses of quinine, the essential cure of ague, but the production of intermittent fever is certainly not one of them. Our homœopathic friends appear to have been much misled by Dr. BRUNTON'S therapeutical index, which indeed seems a sort of *omnium gatherum* largely done by an amanuensis, and so imperfect that Dr. BRUNTON had nearly left it out of his book altogether. His own description of many of their favourite remedies is very slight, and such as to show no personal belief in their specifics. His estimate of HAHNEMANN will be endorsed by all who with sound minds have gone into the study of his views. This estimate is summed up in one or two sentences: "It seems to me that in founding homœopathy HAHNEMANN has proceeded with his facts as he did with his medicines—diluting his active drugs with inert matter, and diluting his facts with much nonsense." Again: "It is the falsity of the claim which homœopathy makes to be in possession, if not of the universal panacea, at least of the only true rule of practice that makes homœopathy a system of quackery."

If homœopaths rely on Dr. BRUNTON for any countenance of their fundamental doctrines they must be wofully disappointed. He is a leader in a new and active school of therapeutics. He is bound to no master. He seeks help in understanding the use of drugs from a study of their action both in health and disease. He gives HAHNEMANN credit where credit can be given, but this does not prevent his denouncing his system, and pointing out to those who have renounced his errors the supreme duty of frankness.

Annotations.

"Ne quid nimis."

THE REGISTRAR-GENERAL'S ANNUAL SUMMARY.

THE Registrar-General's annual summary of the mortality statistics of London and other large English towns in 1886 has just been issued, and contains no statistical fact of more interest than the proof of the continued low death-rate in the metropolis. The London annual death-rate was equal to 24·4 per 1000 in the ten years 1861-70, and fell to 22·5 in the following decennium 1871-80. During the first six years of the current decennium 1881-90, the mean death-rate further fell to 20·5; the rate in the last two years, 1885 and 1886, having been so unprecedentedly low as 19·8 and 19·9. It is worthy of note that the birth-rate in London in recent years has also shown a very considerable decline. In the nine years 1872-80 the range in the birth-rate was only between 35·9 and 35·3; while since 1880 the rate has steadily fallen year by year to 32·3 in 1886. The decline in the birth-rate in recent years has not been confined to London, or even to England; but having regard to

the long-continued commercial depression, which must have affected the growth of towns, it is only reasonable to bear in mind the possibility that the population of London may not have grown since 1881 at the same rate that prevailed between 1871 and 1881. If this has been the case, the Registrar-General's estimate of the London population is too high, and consequently the calculated birth- and death-rates in nine years have been somewhat understated. Allowing for such possible understatement, however, the London death-rate in 1885 and 1886 was, beyond a doubt, unprecedentedly low. Corrected by the distribution of deaths in institutions, the death-rates last year in the five groups of registration districts were 17·7 in the west, 18·0 in the north, 19·2 in the south, 22·5 in the east, and 25·9 in the central; thus, in equal numbers living, mortality in the central group of districts was as 146 to 100 in the west districts. It may be desirable to point out that these central districts of London, where the high death-rates of former days still linger, include St. Giles's, St. Martin's-in-the-Fields, Strand, Holborn, Clerkenwell, St. Luke's and the City. On account, it may be presumed, of the difficulty of estimating the present local population, the Registrar-General does not publish rates of mortality for the individual sanitary areas, which would certainly show a wider range than do the rates in the five groups of districts. The rates of infant mortality (that is, the proportions of deaths under one year to registered births) in the sanitary areas ranged in 1886 from 121 in Plumstead, 130 in Lewisham, and 131 in Hampstead, to 199 in St. Martin's-in-the-fields, 202 in Stepney, 210 in Holborn, and 219 in the Strand. Marked, therefore, as has been the decline in the London death-rate in recent years, the excess of mortality in the central districts, whether measured by the death-rate at all ages or of infants, points conclusively to the possibility of still further reduction.

DR. WITHERS MOORE AND THE BRIGHTON MEETING OF THE ASSOCIATION.

ALL of us remember the successful meeting of the British Medical Association at Brighton last year, and most of us will agree that not a little of the success and pleasantness of it was due to Dr. Withers Moore, whose able address supplied material for articles in the press for a week after. It is no slight testimony to Dr. Withers Moore, and to the liberality of the profession at Brighton, that, after paying the expenses of the Association meeting, a good balance was left, and was appropriated by the subscribers to the purchase of a very handsome solid silver candelabrum, which has been presented in their name by Mr. Edward Turner. The candelabrum bears the following inscription:—"Presented to W. Withers Moore, M.D., F.R.C.P., by his professional brethren, as a testimony of their regard and in recognition of his courtesy and success in discharging the duties of President of the British Medical Association during their recent visit to Brighton in the year 1886." We heartily congratulate Dr. Moore on so graceful and well-earned a tribute from his neighbours, and hope that he may long be spared to use it.

THE PRACTICAL VALUE OF THE GONOCOCCUS.

IN a paper contributed to the *Journal of Cutaneous and Genito-urinary Diseases* (March, 1887), Dr. Charles W. Allen discusses the subject of the specific micro-organism of gonorrhœa, and arrives at favourable conclusions respecting the importance and practical value of Neisser's discovery. Dr. Allen has repeatedly confirmed the observation that the gonococcus is present within the gonorrhœal pus, and even in the watery and mucous discharges of chronic gleet. The detection of the oval cocci within the pus cells is sufficient for diagnosis, the separation of the gonococcus from other bacteria being based on the fact that this microbe, after staining by Gram's method, can be at once decolourised by absolute alcohol, all other organisms remaining visibly stained. The practical value of the discovery is shown in the diagnosis of gonorrhœa in the female, and the determination of the infective character of a discharge at a long period after contagion. Evidence is given where gonorrhœa has remained long latent; and, when called into activity by excesses, has on examination proved still to retain the specific organism. The bearing of this on ophthalmia, neonatorum and on uterine disease is of great importance; and Dr. Allen goes so far as to maintain the value of the test in medico-legal practice. Of course, as he remarks, "great care would have to be exercised to include all possible sources of accidental contamination." We have not yet had recourse to the evidence of a bacteriologist in a court of law, and the belief in the pathognomonic character of the gonococcus will have to be very deeply implanted before we shall rely on such evidence. It is interesting to read the stains on linen have been determined to be gonorrhœal from the detection of the gonococcus. The proof that the gonococcus is the *materies morbi* of gonorrhœa still awaits full confirmation, inoculation experiments having mostly failed; but Dr. Allen refers to successful inoculations by Bumm of cultures, the seat of inoculation being the female urethra. In one case he used the twentieth generation of a pure culture in human blood serum, and induced a typical gonorrhœal discharge, which took five weeks to cure! As regards treatment, the discovery of the gonococcus has not apparently led to any methods superior to those already in vogue, although the use of injections of germicidal solution, as bichloride of mercury, carbolic acid, &c., has perhaps been supported. The difficulty lies in the want of thorough application of the anti-parasitic agent.

THE "DOCTOR."

THE life of the practitioner of medicine can hardly fail to be an eventful one. Apparently free from sensation, and visited not often by opportunities of high distinction, it would be superfluous to say how it abounds in occasions of fruitful effort, how little there is in it which is really little, and how freely it taxes the best energies of those who devote themselves to it. It has been truly said by some who have recently written on this subject that such observations apply most fitly to the life work of the general practitioner. The "doctor," as he is familiarly styled, without too special reference to degrees or qualifications, is a man to whom belong responsibilities the more varied that they are not solely professional, and he had therefore need to be, and commonly is, as truly human in sense and sympathy as he is well trained in the proper duties of his calling. He may be regarded as the most typical representative of his profession. There is in his case no concentration of energy on the treatment of a special illness or group of illnesses. Disease in general is the object of his attack. The whole man he takes to be his specialty, the relief of his bodily needs a large but limited field for his exertions, and he endeavours therefore, without presumption and without denying the special aptitude of pioneers in new methods of treatment, to do his duty as a healer even in so large a field. The personal qualities which befit a man so usefully ambitious had need to be as various as the ever-changing conditions of his daily life. Painstaking, with a care engendered, or at least fostered, by the discipline of student life, and maintained afterwards by a constant need of observation, endowed with a readiness which is the product of actual practice and the confidence that comes of sound instruction, he must, moreover, learn daily the great lesson of self-denial, also how to combine with a shrewd and true

understanding of human nature a sympathy no less just and real with human feeling. We have spoken of non-professional duties as now and then devolving on practitioners, and what member of the profession cannot recall occasions when he has been applied to as an adviser in matters of importance wholly foreign to his province as a medical man? At such times, as inevitable as they are undesired, a judicious mind and a careful tongue are far more to their owner than an accurate knowledge of medicine. It is the possession of these and similar elements of character, as much as technical training, which have earned for family practitioners that reputation for wisdom and integrity which we would in no boastful spirit acknowledge as an honour conferred on the profession as a whole.

INFECTION AND DISINFECTION.

IT has often been pointed out in our columns, as elsewhere, that deodorisation is one thing and disinfection another. The destruction of bad smells by no means involves the destruction of "infective agencies," but the destruction of bad smells is also an important work, and one which every disinfectant intended for general use ought to accomplish. Carbolic acid is defective in this respect, for although a good disinfectant, it does not deodorise, and simply adds its own disagreeable smell to those which existed before. Chlorine, metallic chlorides—such as the chlorides of zinc, mercury, and lead—sulphurous acid, and the alkaline permanganates are far more effectual in this respect, and each possesses in a greater or less degree the power of disinfection. Whilst the "saucer" treatment of sick-rooms with a little Condy's fluid or chloride of lime may well be distrusted, the laudation of such means as the use of euchlorine (a mixture of chlorine and chlorine peroxide) and bromine as aerial disinfectants cannot be commended. Sulphurous acid is sometimes underrated. As gas it is just as unsuitable in the presence of patients as bromine or euchlorine, but in dilute solution it is very active. Complete disinfection of an infected atmosphere in the presence of patients is impossible, but partial disinfection is easy, and the complete disinfection of wearing apparel, bedding, &c., by the prolonged use of weak solutions of metallic chlorides, sulphurous acid, and the like, can be readily effected without the slightest injury to the fabrics.

MEDICAL ATTENDANCE ON THE POOR.

A PAPER, reprinted in pamphlet form, by Dr. F. H. Alderson, on "Medical Attendance on the Poor, not Paupers," brings out many points which it is desirable to keep in view at this moment, when a committee is trying to put attendance on the poor on a satisfactory footing. Dr. Alderson clearly appreciates what we have been trying to show for years, that the provident dispensary system so far has not been a success, either as regards the people or the profession, and that many so-called provident dispensaries are worked by unqualified assistants, and are practically a fraud on the patients. The only cure, however, he sees is in the establishment of dispensaries of an improved type that will attract to their staff good, competent, and popular medical men, at rates that shall be fairly remunerative. Dr. Alderson thinks that at present such institutions cannot be entirely self-supporting, but must have a charitable element. He objects to patients being received in actual sickness, on a ready-money payment, thinking this destructive of the principle of providence or forethought. To meet the difficulty he would allow a certain number of free letters to be used by subscribers in favour of the sick, on the understanding that the latter are to join as soon as they are well. This seems to us as dangerous to the provident system as the principle of admission on special payment, which has been actually adopted by the committee now sitting. One feature of Dr. Alderson's views is the suggestion of a graduated scale of payments ranging from 6s. to 30s. for single persons per year, or 30s. to £6 a year for families. He very properly urges that the payments for children should not be less than threepence per month, as they are most prone to illness and give most trouble. If a friendly system of co-operation between the hospitals and dispensaries could be arranged, it would be good for both. The hospitals would have the dispensaries as a clinical field for the study of common diseases, and the dispensaries would have the right of recommending fit cases to the hospitals, or asking for a consultation with the hospital staff, if necessary. We do not know whether Dr. Alderson is quite right in saying that the classes whose benefit is sought by the committee over which Sir Spencer Wells presides so ably are only the poor, not the industrial classes.

PERINEAL RUPTURES IN THE BRUSSELS MATERNITY.

IN Professor Kufferath's maternity department in Brussels the smallest lacerations of the perineum are sutured immediately. During the year 1886 sixty cases of laceration occurred, varying in extent from one centimetre to four centimetres, the sphincter not being involved in any case. These were mostly operated on by students, with the result that complete primary union was obtained in fifty-one cases, and incomplete union in five more, while in four cases the operation was entirely unsuccessful. The method adopted is as follows. The patient is placed in the (dorsal) obstetrical position, the thighs being separated by assistants. The vagina is washed out by a copious antiseptic injection, and the vulva and perineum scrupulously cleansed, any dead parts being cut away from the torn surfaces. A plug of charpie impregnated with corrosive sublimate is introduced into the vagina, so as to prevent the flow of blood inconveniencing the operator. The left lip of the wound is seized between the thumb and index finger of the left hand, and the needle, which has, together with the silver wire attached to it, been previously disinfected, passed into the skin half a centimetre from the torn edge. When it has reached the bottom of the wound, its direction is changed and it is passed through the opposite lip, its point emerging at a spot corresponding exactly with that at which it was first introduced. Any hæmorrhage produced by the introduction of the needle is removed by charpie impregnated with corrosive sublimate, and the wire is not tied until this has been done. The first suture is placed at the most posterior part of the wound, and the rest near together, one after another, till the fourchette is reached. If necessary, some superficial sutures are added. In this way the edges are retained in close juxtaposition, a condition indispensable for preventing the accumulation of blood and the lochia in the deep parts of the wound, otherwise union cannot take place. The wound is dressed with iodoform, the legs being left quite free. Antiseptic vaginal injections are given twice daily, followed by renewals of the iodoform dressing. On the sixth or seventh day the sutures are removed, the patient being placed for the purpose in the lateral position. Dr. Tournay, who communicates these particulars to *La Clinique*, believes that when the operation as described is properly performed, it is, or ought to be, invariably completely successful, as indeed it always has been in his own hands, whether in the clinic where he is assistant or in private practice. It will be observed that he does not introduce the finger into the rectum, or pass the needle so as to make the entire circuit of the wound, and that he omits all reference to the use of the catheter after the operations, matters which are considered by many writers indispensable to the perfect healing of perineal ruptures.

THE FRENCH ENTRANCE EXAMINATIONS FOR MEDICAL STUDENTS.

M. LORTET, dean of the Medical Faculty of Lyons, has just presented a report to the Council of the Faculty on the subject of the entrance examination required in France from all medical students intending to proceed to the Doctorate This consists of the Baccalauréat ès Lettres and the Baccalauréat ès Sciences modified with regard to the mathematics. M. Lortet appears to have no fault to find with the first of these examinations; but as to the second, or modified B.Sc., he says that men come up as a rule very badly prepared, some of them getting plucked five or six times, and those who do pass doing so with a minimum of marks. Again, the science which the candidates have learned is of but little real use to them, as they have to attend the chemical and other scientific courses afterwards, the medical faculty not considering the courses in the Lycées nearly good enough. It would, in the opinion of M. Lortet, and apparently in that of most of the medical faculties of France, be quite sufficient to insist upon the possession of the Baccalauréat ès Lettres only for medical students leaving them to learn their science once for all at their medical school. A year would in this way be gained. The Lyons examiners would appear to be particularly and increasingly severe, and to have frightened away most of the candidates to other faculties where more merciful boards are to be found, the result being that the Lyons School is suffering from a certain amount of competition downwards. The number of candidates for the modified baccalauréat in Lyons in 1877 was 94, of whom 29 passed; this number has been rapidly decreasing, being 15 in 1885, of whom 4 passed, and 12 in 1886, of whom none passed. Several other medical schools of certainly not superior note to that of Lyons admitted in 1885 a much larger number—e.g., Bordeaux admitted 50; Dijon, 29; and Toulouse, 67. M. Lortet concludes his report by urging the Faculty to transmit to the Minister of Public Instruction a request that the modified Baccalauréat ès Sciences may be dispensed with altogether.

THE EFFECT OF HYDROCHINONE ON URINE AND UREA.

DR. ANTAÉFF, working in Professor Sushchinski's pharmacological laboratory, has recently investigated the effect of the presence of hydrochinone on the alkaline fermentation of urine and on urea itself. Hydrochinone is represented by the formula $C_6H_4(HO)_2$—being, in fact, benzole in which two atoms of H are replaced by hydroxyl; it is isomeric with paracatechine and with resorcine. Mering found it in the urine after arbutine had been given, and Baumann and Presse in that of persons who were taking carbolic acid. Dr. Antaëff found that when 2 per cent. of hydrochinone was added to fresh urine the latter remained entirely free from alkaline fermentation. After twenty-five days no cloudiness or precipitate had formed, there was no ammoniacal odour, the smell being just like that of fresh urine; the reaction, too, was acid. When only 1 per cent. of hydrochinone was added some deposit formed after a time, but there was no ammoniacal odour, and the reaction only became neutral. Observations were then made on solutions of urea. To 100 cubic centimetres of distilled water were added one gramme of urea and one gramme of hydrochinone. After twenty-four hours 17 per cent. of the urea had been decomposed. When the hydrochinone was omitted, only 1 per cent. of urea was decomposed in the same time. Again, when larger quantities of urea were present, hydrochinone in the same quantity as before exerted a still greater effect in increasing the decomposition; thus a 3 per cent. solution of urea lost 0·2 per cent. of its urea, but when hydrochinone was present it lost 13·5 per cent. The solutions of urea with hydrochinone turned a light cinnamon colour, which became darker on standing. The destruction of urea by hydrochinone was believed by Dr. Antaëff to be due, not to a fermentation process, but to a chemical action of hydrochinone upon urea. Dr. Dianin suggests that the action may be analogous with that of acids on urea, which cause it to break up into ammonia and carbonic acid, with this difference, however, that hydrochinone probably forms a compound with the ammonia as it is disengaged, which is not easily decomposed by hypobromite of sodium. This theory will also account for a certain deficiency in nitrogen which was always observed in azometric determinations of urea in solution with hydrochinone.

POOR-LAW AND SANITARY HOSPITALS.

WE have elsewhere adverted to the need for hospital accommodation for infectious diseases in the Toxteth-park urban district—a district which adjoins Liverpool, and as such is very liable to receive infection. The Toxteth guardians have been considering the same subject, and at a recent meeting a proposal was made to arrange with the sanitary authority for the use by them of the new infectious hospital attached to the workhouse in Smithdown-lane. This discussion raises the whole question as to the propriety of sanitary authorities using Poor-law institutions for the isolation of the infectious sick. As to this, we would at once say that unless the Poor-law infectious hospital can be entirely transferred to the sanitary authority, and be administered by a staff wholly different from that belonging to the workhouse, the idea should not be entertained. So long as the hospital remains vested in the hands of the Poor-law authority it is a pauper institution, and all persons entering it are thereby pauperised—a result which sanitary authorities desiring to protect health in their districts have no right to bring about. Formerly, these workhouse fever hospitals were the only ones available, and they were used without any strict inquiry into the social status of the sick; but of recent years new ones have, we believe, not been erected unless there was every prospect of their being needed for essentially Poor-law purposes. The position which Toxteth occupies with regard to Liverpool doubtless affords a sufficient reason for the erection of this new pauper hospital, and the mere fact that it has not been used during the twelve months for which it has been opened is no proof whatever that it is not needed for the precise purposes for which it was erected. The question has now been referred to the General Purposes Committee, and it is important that they should understand at the onset that so long as the hospital belongs to the guardians it cannot be legally used for any non-pauper purposes. Whether a hospital just erected for Poor-law purposes ought now to be alienated from those purposes and transferred to the sanitary authority is another matter, into which we need hardly enter at present.

THE CONTAGIOUS DISEASES ACTS IN INDIA.

A PARLIAMENTARY paper published recently gives a summary account of the machinery by means of which the Contagious Diseases Acts are administered in India. In itself the information is sufficiently interesting to justify its publication, although it might have been considerably improved in this respect by the addition of such statistical facts as would have given the British public some idea of the number of persons affected by them and the character of the work being done. That, however, was probably not the object with which this return was called for. The intention of the promoters no doubt was to attack the administration of these Acts in India, as they have attacked them at home. Experience shows that in this crusade the sanitary results obtained go for little or nothing, and that the responsibility of the Government for preventable mischief

is a doctrine to which the repealers will not listen. Better in their view the nameless horrors of surreptitious vice—so long as it is branded with the name of vice—than the restriction of the ravages of a disease from which countless innocent victims as well as the vicious have to suffer. As yet, however, we hope that wiser counsels will prevail. It is bad enough that our military stations at home have lost the benefit of this useful, though unpopular, legislation. It would be a still worse case if the benefit of such precautions were lost to our army in India. The ostrich policy of turning prudishly away from the consideration of such problems and burying our heads in the sand of *laisser faire* can lead to nothing but disaster.

FATAL RESULT OF INTRA-UTERINE MEDICATION.

DR. OTTO ENGSTRÖM of Helsingfors relates the following case in a Swedish medical journal. A woman, aged thirty-seven, had suffered from persistent metrorrhagia. The uterus was retroflexed, but no signs of past or present inflammation could be discovered. It was replaced and scraped out with a Simon's sharp spoon, two small spoonfuls of hyperplastic tissue being removed. A solution of iodine in iodide of potassium at 45° C. was then injected, the relative proportions of iodine, iodide of potassium, and water being 1, 2, 30. No fever and scarcely any pain followed. In five days' time a second injection was used, the temperature being 40° C., and the relative proportions of iodine, iodide of potassium, and water 1, 2, 10. No pain was experienced, and the patient walked up- and down-stairs. On the evening of the second day, however, a rigor came on, followed by pyrexia, abdominal tenderness, diarrhœa, and convulsions, death occurring two days later. At the necropsy there were found broncho-pneumonia, chronic œdema of the lungs, endocarditis, and purulent peritonitis. The substance of the uterus was soft, friable, and grey-coloured, containing specks of blood and lymph. The peritoneum over the uterus was of a yellowish-red colour and covered with puriform matter. The Fallopian tubes and their fimbriated extremities were not dilated or particularly reddened, and the mucous membrane presented no abnormality. The os uteri was too small to admit a fine probe. A large quantity of pus occupied the peritoneal cavity. Dr. Engström does not think any of the injection can have passed into the tubes, still less into the peritoneal cavity, and believes that the fatal peritonitis was due to an extension of the inflammation directly from the uterine wall to the peritoneum.

HANGING AS A SOURCE OF PLEASURE.

IF those are to be believed who, having been more or less hanged, have been resuscitated, and have narrated their experiences, the much-commiserated victim of the law's extreme penalty is not wholly miserable. It would seem that even death "sus. per coll." has its ameliorating conditions or circumstances. One sufferer in the religious cause in France is said to have "complained" because he was called back to consciousness from an experience of surpassing delights, in which he enjoyed the pleasure of gazing upon the most beautiful scenery. The immediate sensation of pain is momentary; and it would appear not unlikely that, in our anxiety for the avoidance of needless annoyance to those we put to death judicially, we may be actually increasing their sufferings and diminishing their pleasure. The instantaneous deaths have all the pain and little or none of the pleasure. Slowly induced congestion of the brain may be the least painful, and if only the blood pressure be effectually raised at the centre that sees, the beautiful light and charming scenery are enjoyed in the highest perfection. The subject is a grim one, and we are not sure that the new view of hanging experience tends to make the death penalty increasingly deterrent, but it is right that both sides of a question which the late Mr. Whalley once excited the merriment of the House of Commons by describing as "a poor man's question" should be carefully considered at all costs.

THE AIR IN SHIPS' HOLDS.

DR. A. T. DOBROTVORSKI has recently published the results of a number of observations on the character of the air in the holds of Russian men-of-war from a hygienic point of view. In reviewing the works of previous writers on this subject, he claims for a Russian observer, "N. T.," who wrote an article in the *Morskoï Sbornik* (Nautical Magazine) for 1869, the credit of being the first to make definite analyses of the air in ships; observing that Parkes, in the second edition of his book, published in England in 1866 and translated into Russian in 1869, states that the composition of the air in holds is not known. "N. T." found 1·19 per 1000 of carbonic acid on the upper deck of the monitor *Bronenosets* during the night when forty-one men were sleeping there. Dr. Dobrotvorski's estimations of CO_2 were made by means of a modification of Pettenkofer's method proposed by Nagorski, which, however, he does not further describe, though he says it is the most exact and convenient plan, only requiring small bottles of the air. For the free and albuminoid ammonia he employed Dr. Fox's method, as given in his "Sanitary Examinations of Water, Air, and Food." This, as being probably but little known in Russia, he describes pretty fully. In the bilges of the *Peter the Great*, the largest vessel in the Russian navy, the moisture was found to be 89·5 per cent., the CO_2 4·6 per 1000, the free ammonia 0·026 milligramme per 1000 litres, and the albuminoid ammonia 0·246 milligramme. The highest estimates of CO_2 were in frigates and floating batteries, the lowest in clipper ships. In the engine-room of the *Admiral Spiridoff*, an iron frigate built in 1868, the CO_2 was found to be as high as 8·22 parts per 1000. The ammonia found varied a great deal—being, however, only slightly higher in the frigates and batteries than in clipper-built vessels, and bearing little relation to the quantity of CO_2; thus, in the bilges of the *Peter the Great* the albuminoid ammonia was 0·246 milligramme per 1000 litres, in the engine-room of the *Admiral Spiridoff* 0·154 milligramme, while in a part of the floating battery *Pervenets*, where the CO_2 was only 2·37 per 1000, the albuminoid ammonia was 0·564 milligramme per 1000 litres.

INSANITARY BETHNAL GREEN.

THE Mansion House Council, which has investigated the sanitary state of many parts of the metropolis, with reference especially to the housing of the poor, has brought under the notice of the Local Government Board the state of a number of houses in Bethnal-green, where, it is implied, there has been considerable neglect. According to a letter addressed by that Board to the Bethnal-green vestry, it is said that the plan followed on a former occasion—namely, that of requesting the Home Secretary to appoint an officer to investigate the circumstances of the alleged complaint—will be followed this time.

DEATHS OF EMINENT FOREIGN MEDICAL AND SCIENTIFIC MEN.

THE deaths of the following foreign medical and scientific men are announced:—Dr. Wilhelm Brummerstadt of Rostock, well known for his writings on obstetrical and gynæcological subjects. Dr. Johann Streng, Professor of Midwifery in the Bohemian University of Prague. Dr. Andreas Boecker of Berlin, a well-known laryngologist.

TESTIMONIAL TO DR. KENNEDY OF MERCER'S HOSPITAL.

AT a meeting recently held at the Shelbourne Hotel, Dublin, Sir Charles Cameron in the chair, it was resolved to present Dr. B. Burke Kennedy, resident surgeon of Mercer's Hospital, with an address expressive of sympathy with him in the trying ordeal through which he has passed; also to open a "Defence Fund" to pay the heavy legal expenses to which he was put. It will be remembered that a charge of manslaughter was made against Dr. Kennedy for removing a delirious patient from an ordinary to a special ward. After the evidence for the prosecution had been heard, the jury stopped the case, and returned a verdict of acquittal, with the following rider:—"We consider that, according to the evidence, Dr. Kennedy should not have been subjected to the hardship of a prosecution." Subscriptions to the fund should be forwarded to the hon. treasurer, Dr. McVeagh, 1, Rutland-square East, Dublin. A copy of the Report of the Corporation Commission of Inquiry, and of the Abstract of Trial and Verdict in the Law Courts, may, we understand, be had on application to the hon. secretaries—George H. Kidd, M.D., L.R.C.S.I.; Arthur H. Benson, M.D., F.R.C.S.I.; Robert Wade, F.R.C.S.I.; and F. Alcock Nixon, F.R.C.S.I.

THE OVER-STOCKING OF THE PROFESSION.

WE have long pointed out that the creation of new doctors in Great Britain exceeds the waste of the profession by some hundreds yearly. In Germany the increase is so steady and serious, that at the recent meeting of the German Physicians' Association (a society organised, as the *New York Medical Record* puts it, in the social and economic interest of the profession, rather than in that of medical science) an address was issued advising young men against entering the profession as the prospects are becoming worse yearly. The *Record* takes some warning from this action of the German Association. It understands it to mean that there will be a larger importation of pure German physicians into the States. And our contemporary adds, with much force, "as our colleges turn out from 4000 to 6000 new doctors every year, the prospect is, of course, most pleasant."

CHRONIC URETHRAL DISCHARGE.

THIS ailment is one which not unfrequently proves singularly intractable, and calls into requisition all the acumen and practical skill of the surgeon for its successful treatment. It is a disorder of a symptomatic nature which owns many sources of origin, mostly local, but sometimes in part constitutional. What is the appropriate remedy in one case may be, on the whole, unsuited to another, so that empiricism in medication is apt to fail where a rational course of procedure gives the happiest results. It must not be assumed that all cases of urethral catarrh are gonorrhœal—we use the latter term in its clinical, not its pathogenic sense,—for not seldom one meets with patients suffering from chronic discharge, concerning whom the practitioner elicits no evidence to prove or suggest that the disorder is the consequence of impure intercourse. The menstrual flux, lochial flow, or the acrid vaginal secretion often met with in pregnant females, are severally capable of setting up acute or subacute urethritis, which when once initiated may give considerable trouble to eradicate. The complaint, whatever its cause, is, in the ordinary routine of practice, too often assumed to be entirely local in its nature as it was in its incidence. But just as in a strumous individual some slight irritation is apt to start a troublesome attack of eczema, so in patients of a pyogenic tendency urethral catarrh may vary in intensity and duration far beyond the measure of its primary cause. In such cases ferruginous tonics, a bland regimen, and mild astringents are the appropriate treatment. Again, we have known instances in which the removal of obstruction to the free circulation through the hæmorrhoidal vessels has acted beneficially on the urethra—such, for example, as the removal of piles or the cure of chronic constipation. If the discharge is dependent on urethral granulations, the site of which is frequently indicated by increased sensitiveness to catheterism and resistance to the passage of the instrument then gentle pressure with a bougie, continued for, say, a quarter of an hour at a time and repeated two or three times a week, may suffice. Or the pressure may be combined with the application of some astringent in the form of soluble gelatine medicated bougies. On the supposition that the morbid action depends on the vitality of certain microscopical organisms, some surgeons advise the employment of antiseptics, such as iodoform, eucalyptus oil, &c., weak solutions of perchloride of mercury, and the like. These chemical substances are inimical to the life of micrococci, and, moreover, tend to check the physico-chemical reactions involved in the decomposition of animal matter. We cannot deprecate too strongly the unrestricted use of strong astringents—or even of weak solutions for the matter of that; for we are convinced that it is not a rare event for chronic urethral discharge to be perpetuated by the very means adopted for its removal. Nay, further, it is not too much to assert that not a few cases of stricture owe their origin to the practice of doing too much. It should be borne in mind that urethritis has a tendency to get well of itself, and that the tendency may fail in giving place to accomplishment on account of meddlesome surgery.

THE DUCHESS OF CUMBERLAND.

FROM information just received from our correspondent at Vienna, we learn that the preliminary stage of the illness from which the Duchess of Cumberland has been suffering was one of long duration, characterised by languor, insomnia, and disinclination for food, together with anxiety and the possession of painful delusions. Her constitution, which has always been somewhat delicate, appears to have been severely taxed by the troubles incident to maternity. The physical and mental condition of the Duchess is now, however, greatly improved. Artificial feeding has never, in spite of rumours to that effect, been found necessary, and sleep is now obtained without resort to hypnotics. The cheerfulness significant of returning health is also beginning to be manifest. The physicians in attendance express their opinion that the case is a curable one, and that gradual progress towards recovery may be anticipated.

A DANGEROUS TOY.

AN inquest was held on the 6th of April on the body of a boy aged eight years who had died suddenly from asphyxia. At the post-mortem examination, a toy, only too well known as "a squeaker," with the indiarubber bag attached, was found impacted in the larynx. This had formed a most perfect plug, completely closing the air passage. It is to be hoped that this accident may be noted by parents, and the use of this toy forbidden; not only will they thus be relieved from a source of anxiety, but their friends from one of much annoyance.

THE MARGARET-STREET INFIRMARY.

DR. John Beckett, Dr. Tuckey, Dr. Roberson Day, and Mr. Kenneth W. Millican have been elected to fill vacancies at the above infirmary. We are not aware whether all these gentlemen are avowed homœopathists; if they are not, we can but deplore their acceptance of the posts.

REPORTED ILLNESS OF MEMBERS OF PARLIAMENT.

THE Right Hon. the Speaker of the House of Commons has authorised us to state that a paragraph which appeared in several of the morning papers on Wednesday (13th inst.), to the effect that within the last fortnight six members of the Lower House had been incapacitated from attending the debates by diphtheria, is without foundation.

THE ASSISTANT-PHYSICIANSHIPS AT GUY'S.

WE understand that the governing body at Guy's have determined that they will receive and entertain applications from physicians outside the hospital for at least two of the vacancies at present among the assistant-physicians. The appointments will be filled up at the Court of Governors to be held on April 27th, and candidates are requested to send their applications to the treasurer prior to this date. We cannot but think the Court well advised in thus opening up its appointments and in seeking to obtain the best available men for the vacant posts. The example is worthy of imitation by lesser schools.

THE LEICESTER SICK BENEFIT SOCIETY.

MR. JAMES WILLAN, of 62, Humberstone-gate, Leicester, after appearing repeatedly before the borough magistrates for neglecting to show a member the books of the Leicester Sick Benefit Society, has been fined £5 or one month's imprisonment. The magistrates were dissatisfied at the defendant for not producing the ledger, and the vague excuses made by him for not doing so. The financial affairs of this society, and the representation of them by the secretary, have been the subject of much adverse criticism during the last few months, and apparently with too much reason. The defendant gave notice of, but does not seem to have yet made, appeal.

CHILDREN'S TEETH.

IT is gratifying to learn that the importance of proper attention to the teeth of school children—a subject on which we have more than once commented—is coming to be more fully recognised by managers of schools. Thus, at the North Surrey District School, Mr. Henry J. Moxon, L.D.S., has, at the solicitation of the managers, and with the approval of the Local Government Board, just delivered a popular lecture to the officers and senior scholars of the institution, on the construction, function, and means of preserving the teeth. This, we believe, is the first occasion on which an address of the kind has been given in a Government school, and it offers an example which may well be followed in other similar establishments.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—Privy Councillor Olshausen of Halle has accepted the invitation to fill the late Professor Schroeder's chair of Midwifery, and will commence his lectures on May 1st.

Buda-Pesth.—A new department for ear diseases in the Rochus Hospital has been established under the charge of Professor Böke, who gives clinical instruction there.

Marseilles.—The Medical School has recently increased considerably, and a chair of Bacteriology has been founded, for which the Council-General of the Bouches-du-Rhône has voted the sum of 2000 fr. The Chamber of Commerce has passed a resolution expressing its desire that the Medical School, which is at present one of the *écoles de plein exercise* or second-grade schools, should be converted as soon as possible into a faculty or first-grade school. It is stated that the number of entries has been for the doctorate 129, and for the licence (as *officier de santé*) 114, besides 381 in the Pharmaceutical School.

Rostock.—The chair of Botany, vacated by Professor Göbel, who has gone to Marburg, has been offered to and accepted by Dr. Paul Falkenberg, Extraordinary Professor in Gottingen.

Würzburg.—The vacant chair of Psychological Medicine, which was offered to Professor Jolly of Strassburg, having been declined by him, will now be offered to Dr. Rieger, *privat docent*.

TEACHING AT THE "ZOO."

IT may not be generally known that by the combined liberality of the Zoological Society and the Association for the Extension of University Teaching, facilities are now offered to students desirous of obtaining a real and practical knowledge of the science of zoology. Familiar demonstrations will be given by Professor Beddard to all who choose to attend during the next three months, at a cost not exceeding the bare price of admission to the gardens. In arranging this course the University Teaching Association has taken a decided step in the right direction, and it is to be hoped that further advances will be speedily made towards the development in the teaching of physical science.

ON the 12th inst. Dr. Daniel Rutherford Haldane died at his residence in Edinburgh. The deceased took the degree of M.D. at the University of Edinburgh in 1848, and became a Fellow of the Royal College of Physicians in 1852. He was a Fellow of the Royal Society of Edinburgh, and several years ago received the degree of LL.D. from the University of Edinburgh. Dr. Haldane was for some time president of the Royal College of Physicians of Edinburgh, and represented the College in the General Council of Medical Education and Registration of the United Kingdom.

THE sudden death on the 8th inst. is reported of Mr. J. J. Eberle, of Thirsk. The deceased was well known in the profession, having for many years acted as a private tutor for the various medical examinations of the licensing bodies.

AT the next meeting of the Royal Statistical Society on Tuesday evening next, the 19th inst., at the Royal School of Mines, 28, Jermyn-street, a paper on "Class Mortality Statistics" will be read by Mr. Noel A. Humphreys.

THE circumstances attending the sinking of the emigrant ship *Kapunda* have largely influenced the Board of Trade in the determination to ask for the appointment of a Select Committee to inquire into the subject of loss of life at sea.

ANTITHERMIN is the latest introduced antipyretic agent. It is allied in its chemistry to antipyrin; phenyl-hydrazin-levulinic acid is the chemical name.

DR. ROBERT BARNES has been elected an Honorary Fellow of the Chicago Gynæcological Society.

PRESTON MEDICO-ETHICAL SOCIETY.—At the annual meeting of this Society, held on Thursday, March 31st, the following members were re-elected officers:—President: Dr. Moore. Vice-President: Dr. Lonie. Treasurer: Dr. Walmesley. Committee: Dr. Smith, Dr. Garner, Dr. Green, Dr. Rayner, Dr. Trimble, and Dr. C. Rigby. Hon. Secs.: John Holden and J. J. Byrne. The subjoined resolution was also passed: "That, in the opinion of this Society, it is very desirable that an independent inquiry be made on the sanitary condition of the town by the Local Government Board, more especially in regard to the high mortality."

VOLUNTEER MEDICAL STAFF CORPS: EASTER MARCH.

THREE companies of this corps joined in the Easter manœuvres of the Volunteers, two going to Dover and one to Eastbourne. The Dover contingent, about 100 strong, with full complement of officers, left Charing-cross on Friday morning, under the command of Surgeon-Major A. T. Norton. The men were divided into two companies under Surgeon-Major Casson and Surgeon Willett. The Adjutant, Surgeon Lees Hall, M.S., and Surgeons Lake and Raw also accompanied their seniors. On Friday night the corps took part in the night attack, and during and after the fight kept up careful search for wounded men over the scene of the fight. At Dover the headquarters of the corps were marked by a conspicuous white flag emblazoned with a red cross. On Saturday the force had a very long tiring march, moving in three columns by different routes from Bridge and Canterbury to Dover. Each column was accompanied by an ambulance and water-cart, and the senior medical officer was responsible for the medical arrangements, Surgeon Whitmore (3rd London), Surgeon Jones (14th Middlesex) and Surgeon Buck (17th Middlesex), being in charge of the columns. The Volunteer Medical Staff Corps accompanied the centre column. Only eight men fell out during the day, which is a matter of congratulation, considering that the right column marched twenty-three miles over very rough country. In this column only two men fell out.

On Monday the bearer companies marched past with great *éclat*, their smart appearance and well-locked up ranks eliciting much approbation. A company of the V.M.S.C. also went to Eastbourne under Surgeon Squire. On the Tuesday before Easter, however, a small party of fourteen men under Serjeant MacLeod very pluckily set out to march to Eastbourne with regulars. The main body of the company marched on Friday morning, Surgeon Valentine Matthews joining it later on. The company was well equipped with mule litters, and had its own signallers. At Eastbourne a station hospital was established. Ample opportunity was afforded the men of learning what real work meant, and their smart appearance elicited hearty applause on more than one occasion from on-lookers. Staff Quartermaster Robertson and Quartermaster Clarke accompanied the Dover companies; Quartermaster J. J. Thomson accompanied the Eastbourne company, and from the careful preparations of these gentlemen, combined with the invariable hospitality of the medical men throughout the districts through which they marched and were stationed, most certainly the V.M.S.C. had no cause of complaint.

Some real surgical work occurred during the day, showing the efficiency of the medical staff and the men attached to their corps. It appears that towards the end of the action three gunners of the 3rd Kent Artillery force were injured by the premature discharge of a gun. There happened to be no surgeon with the battery, so that their comrades proceeded to render "first aid" whilst a surgeon was sent for. Mounted officers galloped off in two directions—one to the field hospital and the other in the direction of the bearer company. Acting Surgeon Pearce, M.D. Lond., of the "Artists," on duty at the field hospital at Maydensoule Farm, speedily providing himself with a surgical haversack, rode across country at once to the scene of the accident. He found that Gunner Whitmore, who was seriously injured, had been placed on a stretcher made of a hurdle, an improvised tourniquet had been efficiently applied above the elbow, and the shattered hand well bandaged. He was being borne towards a neighbouring farm near the scene of the accident. He was then carried into the farmhouse and laid upon a couple of tables. At this moment Surgeon Raw and Quartermaster Webb, A.M.D., with a detachment of the Volunteer Medical Staff Corps, all of them medical students from St. Bartholomew's, London, Guy's, and St. Mary's Hospitals, arrived in an ambulance waggon completely equipped with surgical appliances and medical comforts. Surgeon Pearce took charge of the case, and before proceeding to further steps Surgeon Raw administered chloroform, and the shattered limb was examined after reapplication of a tourniquet, the fracture set, wounds dressed, and the injury of the eye and scorching of the head attended to. The unfortunate man was placed in an ambulance waggon and conveyed to Dover Castle Station Hospital, where the limb was amputated below the elbow by Surgeon-Major Greenhill, G.M.O., Surgeon-Major Slaughter, Surgeon Begg, M.S., with the active assistance of Surgeon Raw and Acting-Surgeon Pearce. The other injured men, who were much scorched about the face, were conveyed to the field hospital, and received attention from Surgeon Bourlton, M.S. The whole medical administration for the day reflects great credit upon the medical authorities, and the accidents which we regret to have to record found the medical aid of the Volunteer department, of which we have heard so much lately, not wanting when the time of real emergency arrived.

THE LANGMORE DEFENCE FUND.

WE published last week from Dr. Leachman a letter headed "A Victim of the Law," and appended some comments thereto, in which we intimated that a subscription had been started by the Council of the Metropolitan Branch of the British Medical Association to reimburse the gentleman referred to in that communication, the costs of the defence in a suit (Hughes *v.* Langmore and others) which, it will be remembered, came on for hearing before Mr. Justice Manisty in November, 1886, and which resulted, after four days' trial, in a verdict for the defendants with costs. The amount of the costs was considerably increased by the fact that, on the plaintiff's petition, one of her witnesses (the doctor who was actually attending her at the time of Dr. T. W. Langmore's visit) was examined by special commission; but at the trial the plaintiff refused to put in the evidence thus taken, or to place the witness himself in the box, though it was elicited that he had been quite recently, and it was inferred that he was then, resident in England. The plaintiff being a person of small means, Dr. Langmore has not been able to obtain payment from her of any portion of the costs awarded him, and has been called upon to pay legal expenses amounting to £240 8*s.* 1*d.*, irrespective of personal expenses connected with the action, and the inevitable loss of time and practice. Donations should be sent to Mr. George Eastes, M.B., 69, Connaught-street, Hyde-park-square, London, W., one of the honorary secretaries of the Metropolitan Counties Branch.

The following subscriptions to the fund have been already promised or received:—

	£	s.	d.		£	s.	d.
Mr. W. Adams	3	3	0	Sir W. W. Gull, Bart. ...	2	0	0
Mr. C. A. Aikin...	2	2	0	Dr. C. J. Hare	5	5	0
Mr. C. B. Aikin...	1	1	0	Sir W. Jenner, Bart., M.D.	10	10	0
Mr. W. Morrant Baker ...	2	2	0	Dr. G. Johnson	1	1	0
Dr. R. Barnes	1	0	0	Mr. H. Juler	1	1	1
Dr. G. P. Bate	1	1	0	Dr. Norman Kerr	1	1	0
Dr. J. S. Bristowe	2	2	0	Dr. A. W. Leachman ...	5	0	0
Mr. Lennox Browne ...	1	1	0	Dr. J. D. Mann...	1	1	0
Dr. T. Buzzard	2	2	0	Dr. H. C. Martin	2	2	0
Dr. W. B. Cheadle	3	3	0	"Member of the Branch"	0	10	0
Mr. Willington Clark ...	2	2	0	Mr. J. J. Merriman	1	1	0
Dr. W. F. Cleveland ...	1	1	0	Dr. T. Morton	0	10	0
Mr. G. A. Critchett	1	1	0	Dr. Dawson Nesbitt... ...	1	1	0
Dr. H. R. Crocker	1	1	0	Mr. E. Owen	1	1	0
Mr. J. B. Curgenven... ...	1	1	0	Sir James Paget, Bart. ...	2	2	0
Dr. W. H. Day	1	1	0	Dr. W. Price	1	1	0
Dr. J. Langdon Down ...	1	1	0	Dr. Henry Savage	2	2	0
Dr. J. Matthews Duncan ...	1	1	0	Mr. W. S. Sibley	2	2	0
Mr. A. E. Durham	2	2	0	Mr. Morton Smale	1	1	0
Dr. John Easton	2	2	0	Dr. W. V. Snow...	1	1	0
Mr. W. Fuller	0	10	0	Dr. C. S. Ticehurst	1	1	0
Dr. A. T. Gibbings	0	10	6	Mr. J. Smith Turner ...	1	1	0
Dr. J. F. Goodhart	1	1	0	Mr. A. M. Vann...	0	5	0
Dr. W. R. Gowers	1	1	0	Dr. E. H. Vinen	1	1	0
Dr. W. C. Grigg	2	2	0	Dr. Julian Willis	1	1	0

PASS AND PLUCK IN BRUSSELS.—At the recent examinations in the University of Brussels for the Doctorate in Medicine, one out of ten was rejected for the first Doctorate, and four out of ten for the second, while all the seven candidates for the third Doctorate, or final examination, passed, so that only five of the whole twenty-seven candidates failed to satisfy the examiners. From the list of names published it would appear that there were no candidates, or at least no successful ones, from this country. In the two preliminary examinations for the title of candidate dealing with anatomy, physiology, chemistry, &c., six candidates were rejected out of a total of sixteen.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Bedford Urban District.—Dr. Prior deals at considerable length in his annual report for 1886 with the question of isolating cases of infectious diseases. Bedford is one of those towns which can make a sort of plea that such accommodation is not pressingly needed by them, because there is a special fever hospital at the General Infirmary, and also a so-called small-pox hospital just outside the town. But the fever hospital belongs to a body of governors; it is unfit for the reception of two kinds of infectious fever, although the different floors were at one time so used before disaster occurred in consequence, and as a matter of fact it does not answer the public health requirements of the district. Then the small-pox hospital is an iron shed belonging to the guardians, and as such leading to the pauperisation of those who use it; it is also a deterrent and unsuitable building. Taking Bedford with this provision, Dr. Prior compares it with Biggleswade, where a proper hospital has been erected, and he gives it as his experience that it is such a hospital which is needed for the Bedford urban and rural districts. And he gives force to his contention by showing his authority that Bedford is probably on the verge of another scarlet fever epidemic. Even if the two authorities referred to are not prepared at once to provide for the total needs of their two districts, they would do well to secure a proper site and make a commencement by erecting such an isolation pavilion as is shown in the recently issued diagram of the Local Government Board. And as they progress in this matter it would be well if they were to receive all infectious cases by arrangement with the General Infirmary, and enable the existing fever building to be utilised for the general purposes of the infirmary. Bedford had in 1886 a death-rate of 15·42 per 1000.

Kettering Urban District.—Mr. Dryland finds remonstrance with parents as to the impropriety of feeding infants with the food of adults quite useless, and this notwithstanding the fact that the practice leads to a waste of infant life which could easily be avoided. Some typhoid fever has occurred in connexion with polluted well-water, and apparently a difficulty is experienced here which is often felt elsewhere. It is not easy to ensure closure of wells unless pollution can be proved, but wells sunk in dangerous relationship with contaminating sources are often only intermittently fouled, and hence action has to be delayed until the evil which should be avoided has actually taken place. In this case water evidently producing typhoid fever could on certain occasions be found to pass as uncontaminated in the analyst's hands, and under such circumstances the owners of the wells, and even magistrates, are disinclined to believe that the negative evidence of the chemist is, in such cases, all but valueless. But we would counsel officers of health to support their action in such instances by making widely known in court and elsewhere the evidence published on this subject in Dr. Buchanan's official report a few years back. Good work is going on in Kettering as to the abolition of privies, the fitting of flushing apparatus to closets, the reconstruction of house drains, and the supervision of such establishments as slaughter-houses. A small outbreak of small-pox took place last year, but no recently vaccinated person was affected. The death-rate for 1886 was 17 per 1000.

Toxteth Park Urban District.—In this favoured suburb of Liverpool the annual death-rate for 1886 was 13·4 per 1000 on a population of some 17,500. The zymotic rate was somewhat higher than the average; the more fatal of the diseases in question having been measles, whooping-cough, and diarrhœa. Amongst the infectious diseases which were reported to Dr. Steeves there were 24 from scarlet fever, 14 from diphtheria, and 2 from typhus. These occurrences alone suffice to show the need for being prepared to isolate the first attacks, and the report states that during the year a site for a hospital was inspected by Dr. Thorne Thorne and General Carey, of the Local Government Board. The site is one in which the adjoining district of Wavertree is interested, and probably owing to the failure to secure united action between the two authorities delay is taking place in this important matter. In the meantime good sanitary work is in progress; dairies and bakehouses are inspected, and ashpits are subject to a weekly supervision.

Towyn Urban District.—In connexion with an outbreak of some fifty cases of scarlet-fever at Bryncrug, Mr. Grosholz brings under the notice of his sanitary authority the more recent information as to the causation of this disease, but he is able to show that infectious diseases are by no means prevalent. In some respects the water-services would be improved if filtration and increase in quantity could be provided. Towyn drainage scheme unfortunately has fallen through, and certain parts of the town have to trust to cesspools. This town is one to which visitors are now attracted, and all its sanitary circumstances should be carefully looked into. At Aberdovey improvements in sewerage are needed; at Bryncrug water-supply and privies need attention; but, speaking of the district generally, much has been done in the interests of cleanliness. The general death-rate during 1886 was 17·9, and the zymotic rate 0·54, per 1000.

Brentford Urban District.—This district continues to make some trivial use of the Highgate and Islington-road Hospital for its infectious cases; but it is dangerous to trust to the accommodation there, for at any moment there may be none available. The zymotic rate was unusually high, this being mainly due to whooping-cough and measles; but at any time it may be some disease urgently calling for isolation, and hence Mr. Williams begs the authority to consider the needs of the district in this respect. Progress has been made as to sewerage and drainage in the district, which in 1886 had a death-rate of 18·9 per 1000.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5426 births and 3641 deaths were registered during the week ending April 9th. The annual rate of mortality in these towns, which had been 23·5 and 21·6 per 1000 in the preceding two weeks, further declined last week to 20·5. During the last quarter the death-rate in these towns averaged 20·0 per 1000, and was 2·2 below the mean rate in the corresponding periods of the ten years 1877-86. The lowest rates in these towns last week were 17·0 in Portsmouth, 17·1 in Birkenhead, 17·2 in Brighton, and 17·8 in London. The rates in the other towns ranged upwards to 25·4 in Sunderland, 25·9 in Cardiff, 28·0 in Oldham, and 32·6 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had increased in the eight preceding weeks from 340 to 471, further rose last week to 502; they included 250 from measles, 117 from whooping-cough, 41 from scarlet fever, 24 from diphtheria, 34 from "fever" (principally enteric), 33 from diarrhœa, and only 3 from small-pox. These zymotic diseases caused the lowest death-rates last week in Wolverhampton, Portsmouth, and Bolton; and the highest rates in Cardiff, Norwich, and Sunderland. The greatest mortality from measles occurred in Hull, Huddersfield, Oldham, Manchester, Norwich, and Sunderland; whooping-cough in Bristol, Huddersfield, Blackburn, and Cardiff; scarlet fever in Birkenhead, Blackburn, and Bristol; and "fever" in Birkenhead and Manchester. Of the 24 deaths from diphtheria in the twenty-eight towns, 15 occurred in London, 2 in Liverpool, and 2 in Oldham. Small-pox caused 2 deaths in Cardiff and 1 in Blackburn, but not one either in Greater London or in any of the twenty-five other large provincial towns. Nine cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease, including 8 which were admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 509 and 417 in the preceding two weeks, further declined last week to 363, and were 141 below the corrected average. The causes of 93, or 2·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Preston, Bolton, and in six other smaller towns. The largest proportions of uncertified deaths were registered in Sunderland, Salford, Blackburn, Liverpool, Oldham, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 26·2, 25·9, and 23·5 per 1000 in the preceding

three weeks, further declined to 22·9 in the week ending April 9th; this rate exceeded, however, by 2·4 the mean rate in the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 14·6 and 15·8 in Perth and Leith, to 25·1 in Glasgow and 32·4 in Aberdeen. The 573 deaths in the eight towns last week showed a further decline of 15 from the numbers in recent weeks, and included 34 which were referred to measles, 33 to whooping-cough, 12 to diarrhœa, 11 to scarlet fever, 8 to "fever" (typhus, enteric, or simple), 4 to diphtheria, and not one to small-pox; in all, 102 deaths resulted from these principal zymotic diseases, against 127 and 111 in the previous two weeks. These 102 deaths were equal to an annual rate of 4·1 per 1000, which exceeded by 1·3 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of measles, which had been 55 and 43 in the preceding two weeks, further declined last week to 34, of which 21 occurred in Aberdeen and 13 in Glasgow. The 33 deaths from whooping-cough showed an increase of 2 upon the number returned in each of the previous two weeks, and included 11 in Glasgow, 9 in Edinburgh, 7 in Dundee, and 4 in Aberdeen. The 11 fatal cases of scarlet fever, of which 5 occurred in Edinburgh and 3 in Glasgow, exceeded the number in the previous week by 5. The 12 deaths attributed to diarrhœa showed a decline from recent weekly numbers, and agreed with the number in the corresponding week of last year; 5 occurred in Glasgow and 3 in Edinburgh. Six of the 8 deaths referred to "fever" were returned in Glasgow, as well as all the 4 fatal cases of diphtheria. The deaths from acute diseases of the respiratory organs in the eight towns, which had been 152, 146, and 132 in the preceding three weeks, further declined last week to 110, but were 1 above the number in the corresponding week of last year. The causes of 68, or nearly 12 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 31·3 per 1000 in each of the preceding two weeks, declined to 30·0 in the week ending April 9th. During the thirteen weeks of last quarter the death-rate in the city averaged 30·9 per 1000, the mean rate during the same period being but 17·8 in London and 19·4 in Edinburgh. The 203 deaths in Dublin last week showed a decline of 9 from the number returned in each of the preceding two weeks; they included 5 which were referred to measles, 5 to diarrhœa, 2 to "fever" (typhus, enteric, or simple), 2 to scarlet fever, 1 to whooping-cough, and not one either to small-pox or diphtheria. Thus 15 deaths resulted from these principal zymotic diseases, against 18 in each of the preceding two weeks; they were equal to an annual rate of 2·2 per 1000, the rates from the same diseases being 1·7 in London and 3·6 in Edinburgh. The fatal cases of measles showed a slight further increase upon recent weekly numbers, and those attributed to diarrhœa were considerably more numerous; those referred, however, to "fever" and scarlet fever showed a decline. The deaths of infants showed a further increase upon recent weekly numbers, while those of elderly persons had further declined. Four inquest cases and 2 deaths from violence were registered; and 62, or nearly a third, of the deaths occurred in public institutions. The causes of 25, or nearly 14 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon William O'Halloran is granted retired pay, with the honorary rank of Deputy Surgeon-General (dated April 13th, 1887); Brigade Surgeon William Cherry has been granted retired pay, with the honorary rank of Deputy Surgeon-General (dated March 28th, 1887); Surgeon-Major Daniel Charles Grose Bourns, from half-pay, to be Surgeon-Major, vice F. H. Welch, promoted (dated April 1st, 1887).

ADMIRALTY.—The following appointment has been made:—Mr. William Hunter, to be Surgeon and Agent at Rothesay.

James Booth Clarkson, L.R.C.P., &c., Surgeon Superintendent in Her Majesty's Government Emigration Service, has been transferred as Lieutenant from the 19th Lancashire Rifle Volunteers to the 3rd Battalion, Royal Fusiliers (City of London Regiment)—the old Royal Westminster Militia.

ARTILLERY VOLUNTEERS.—1st Banff: David Lechmere Anderson, Gent., to be Acting Surgeon (dated April 13th, 1887).

ENGINEER VOLUNTEERS.—1st Newcastle-on-Tyne and Durham: Acting Surgeon C. N. Lee, M.B., resigns his appointment (dated April 13th, 1887).—1st London: Sidney Reginald Dyer, M.R.C.S., Gent., to be Second Lieutenant.

RIFLE VOLUNTEERS.—4th Lancashire: Acting Surgeon W. M. Roocroft, to be Surgeon (dated April 13th, 1887).—2nd Oxfordshire: John Arthur Rigge, Gent., to be Acting Surgeon (dated April 13th, 1887).—1st Volunteer Battalion, the Princess of Wales's Own (Yorkshire Regiment): Charles Tweedy, Gent., to be Acting Surgeon (dated April 13th, 1887).

Correspondence.

"Audi alteram partem."

THE COLLEGE OF PHYSICIANS, THE COLLEGE OF SURGEONS, AND THE APOTHECARIES' SOCIETY.

To the Editors of THE LANCET.

SIRS,—From your admirable leading article in last week's LANCET, I collect that Mr. Berkeley Hill has enumerated "Dublin" amongst the "places of refuge for those who have been repeatedly rejected in London." So far as the College of Surgeons in Ireland is concerned, I give that statement an unqualified contradiction, and I challenge Mr. Berkeley Hill to support it with one single example. With respect to your observations as to the duties thrown upon the Medical Council in face of the present unfortunate condition of affairs, I fully endorse them, and that to such an extent that more than ten days ago, I sent a notice of motion for our forthcoming meeting of the General Medical Council couched in the spirit of your remarks.

Faithfully yours,

Dublin, April 12th, 1887. RAWDON MACNAMARA.

To the Editors of THE LANCET.

SIRS,—The President of the Royal College of Physicians stated the other day, at a meeting in reference to the union of the Apothecaries' Society with that body, that the College does not compete with the former corporation. I wish to ask if the chief design of the creation of the grade of Licentiates of the College was not of set purpose to compete with the Society of Apothecaries? I have the most distinct recollection of the fact that the chief argument used at the time of its creation was that it would rescue the future general practitioner from being called an "apothecary." Previously the Society of Apothecaries and the College of Surgeons of England qualified, and well qualified, the general practitioner, and I submit that we have gained nothing by the substitution of the name "Licentiate of the College of Physicians" for the name "Licentiate of the Society of Apothecaries." Neither of the corporations gives a qualification in surgery that is of the slightest value in the estimate of the profession; and if the examination for the licence of the College of Physicians were dropped to-morrow, we should not feel its loss, for I have yet to learn that either its curriculum or its examinations are stricter or better in any sense than those of the Society of Apothecaries. I rather think anyone, recollecting with myself the creation of this "Licentiate" of the College of Physicians, will not fail to see that not only has the College successfully competed with the Society of Apothecaries, but has passed up an order or grade of men who neither in status nor practice differ from the Licentiate of that body.

I am, Sirs, your respectfully,

April, 1887. M.D. LOND.

To the Editors of THE LANCET.

SIRS,—I feel somewhat apologetic in criticising any remarks of a gentleman so eminently distinguished as Mr. Berkeley Hill, but being one of those men upon whom his stigma of reproach has fallen, I am sensible of the honour

even of his contempt. I, for one, did not go up for the L.R.C.P. Edin. because I had failed in London. I have never presented myself at the London College, having had a higher diploma in view, although I was exempted from part of their first examination. Having obtained my M.R.C.S. (I may add without being ploughed), and wanting a medical qualification directly, I went to Edinburgh, where there is an examination for the licence every month. Does Mr. Berkeley Hill think that taking materia medica with the final examination, as at Edinburgh, does not add another element of risk; whereas in London that subject is taken separately? Secondly, I may add that if one does not pass on the paper work, one is not allowed to make up in the clinical and *viva voce* examinations. Thirdly, one has known cases of men who were proverbial for being lazy at their hospital, yet still pass their L.R.C.P. Lond., to the astonishment of their friends. No doubt this is so at Edinburgh, but it does happen in London also. Finally, does Mr. Berkeley Hill think that examinations are conclusive tests of ability? Would all well-qualified men be able to pass all their examinations again equally successfully? Is it not true that a man may not be able to localise a cerebral lesion, but be still a good physician? In conclusion, the vexed question of degrees and diplomas is a disgrace to our profession, and the sooner there is one and only one degree for every medical man in the kingdom, the sooner will good taste and brotherly feeling become the rule and not the exception. There are not a dozen degrees at the Bar. It is the work done that makes the man. Why should it not be so in the medical profession? I am, Sirs, yours obediently,

April 12th, 1887. M.A., M.R.C.S., L.R.C.P. Ed.

To the Editors of THE LANCET.

SIRS,—The sum and total of Mr. Davy's letter is, that the Apothecaries' Society should not be allowed a seat on the Conjoint Board, because by so doing they would perpetuate the idea that seems to exist amongst the profession of drugs occupying the first place in our treatment. I do not think an opinion formed upon so poor a ground will carry much weight with those who have to deal with the question. The subject has been well threshed out, but I ask you to allow me to mention a few points which seem to escape those of your correspondents who, while they sneer at the L.S.A. diploma, exalt that of the College of Surgeons.

1. If the standard of the Hall examination is so inferior, as is supposed by many, to that of other examinations, why does the College of Surgeons of London accept as equivalent to their examination in Medicine and Midwifery that conducted by the Hall, whereas the Scottish corporations do not accept it?

2. Some years ago the College of Surgeons granted their diplomas without examining in medicine. Are not those who possess such diplomas, and have not a medical qualification, quite as inefficiently qualified to practise as the L.S.A.'s?

3. And has it not been stated in the Medical Council that the standard of the examination of the Apothecaries' Society is equivalent to that of the College of Physicians, London, as ascertained by the examination visitors appointed by the Council?

Many suppose that the reason the Hall examination is not a fair test is because the time given to answer the written questions is so short that it is impossible to gain a fair idea as to the candidate's knowledge, whereas at the L.R.C.P. examination more time is given, and a better result obtained. I think the case is like an examination in algebra—the candidate who solved the most equations in the shortest time would be more successful than he who took the longest time. I may say that the corporations of Edinburgh conduct their examination much in the same manner as the London Apothecaries. Examinations are poor tests of knowledge, and no man should too highly praise his own diplomas or decry that of his neighbours. I submit, in the interests of the public and of our poorer students, who cannot afford a more expensive diploma, that the Apothecaries' Society will carry on the good work she has rendered to the profession hitherto, so that she will be able to write on her walls, "Tuta virtute mea."

I remain, Sirs, yours obediently,

April, 1886. JUSTITIA.

THE SURGICAL TREATMENT OF PULMONARY CAVITIES.

To the Editors of THE LANCET.

SIRS,—In the various modes of operative procedure referred to in Mr. Godlee's interesting lecture on the Surgical Treatment of Pulmonary Cavities, published in your issues of the 5th and 12th inst., an amount of injury to lung tissue is involved which is calculated to excite dismay in those whose experience of such formidable operations is limited, or who are mindful of the disastrous consequences which frequently follow even the most trivial wounds of the respiratory organs. The advantages of the simple and comparatively trifling operation of paracentesis thoracis, in cases similar to some of those described, do not appear to have engaged his attention, nor, as far as I am aware, that of any other surgeon of recent times who has specially studied the subject of pulmonary surgery. That such an operation would be attended with satisfactory results in cases where the tubercular process had reached the stage of formation of a cavity is shown by the history of the following case, the details of which I had the privilege of noting some years ago, whilst the patient was under the care of Professor D. C. O'Connor in the Mercy Hospital in this city.

T. K——, aged twenty-seven, admitted December 21st, 1881, stated that in the month of May of the previous summer, he had had a severe attack of hæmoptysis, in consequence of which he had attended the out-patient department of the hospital. A second attack of the same kind, two months later, obliged him to seek admission as an in-patient, and it was then found that he had lost considerably in weight since he first sought treatment. He was troubled by a severe cough, with night sweats; and under the right clavicle all the symptoms which indicate the existence of a pulmonary cavity were apparent. At the end of three weeks, during which the usual methods of treatment were adopted without influencing the course of the disease to any appreciable extent, an event of a remarkable nature occurred. One morning, whilst the patient was changing his position from the right to the left side, he suddenly experienced a sense of suffocation, attended by severe pain, which was referred to the right pectoral region. The dyspnœa rapidly abated, but the pain continued with varying degrees of intensity for two days. On examination it was found that the respiratory movements of the chest walls on the affected side were scarcely perceptible; percussion was markedly tympanitic all over the area of the pleural cavity; the respiratory sounds were altogether absent, and the patient could only rest comfortably in the dorsal position or on the right side. In fact, all the signs of a pulmonary cavity had disappeared, and their place was taken by those of a distinct pneumothorax. Subsequently the patient rapidly improved, and after an interval of a fortnight was discharged, in order to enable him to avail himself of an opportunity which offered of residing in a healthy country district.

In this case there can be no doubt that what happened was this. In the effort of making a change of position, an inspiration followed by closure of the glottis caused an unusual strain on the pulmonary tissue, which, together with the pleura pulmonalis, gave way at a weak point, allowing air to enter the pleural cavity and causing collapse of the lung. As a consequence of this occurrence, which may be regarded as a paracentesis thoracis from within, so to speak, the condition of the patient, as has already been remarked, underwent a considerable change for the better; and that this is what we ought to expect, a consideration of the pathological conditions established by the collapse will show. The presence in any organ, for physiological purposes, of a large quantity of blood creates in that organ an especial tendency to the inflammatory process, which has been recognised and admitted as the initial step in the commencement of many morbid phenomena, both those which have been identified as being due to the presence of a specific bacillus and those which have not yet been so identified. In the case of the lungs this tendency is much exaggerated by the highly venous condition of a great portion of the blood circulating in them. Nor is it necessary that the point of actual congestion should be reached in order to establish the danger. When collapse of a

tubercular lung occurs, this great volume of venous blood is excluded from the seat of disease; a pure and nutritious supply, comparatively free from effete material, is derived from the bronchial arteries, and thus an impetus is given to the process of repair which nature is continually striving to establish, even under the most adverse conditions. But it is not in the stage of disintegration alone that the beneficial effects of pulmonary collapse would be evident. In the earlier periods of tuberculosis, when the "deposit" exists in the form of an integral mass, it is readily conceivable that the cutting off the inflammatory blood-supply would have even a more powerful influence than in the later stages of the disease. The abnormal product would be strangled at the outset before the constitutional effects of the local lesion had reduced the general health below par, and thus a serious obstacle to the success of operative measures would be avoided.

There is another symptom in the phthisical series, the urgency of which should secure for the operation of paracentesis a favourable consideration at the hands of the surgeon. I refer to profuse and uncontrollable hæmoptysis.

Apart from the pathological points indicated, the effect of collapse in reducing the pulmonary circulation to a minimum is so evident that it is unnecessary to do more than refer to it. The operation, if carried out with a reasonable amount of care, and with proper antiseptic treatment of the warmed air admitted to the pleural cavity, ought to be free from danger, either at the time of performance or subsequently.

I am Sirs, yours faithfully,

F. E. ADAMS, M.D., M.Ch.,
Extra Physician to Cork Fever Hospital.

Camden Quay, Cork.

THE PULSE.

To the Editors of THE LANCET.

SIRS,—I have noticed that Dr. Broadbent suggests that irregularity of the pulse in mitral regurgitation may be due to the respiratory movements. Allow me to offer another suggestion in explanation, which occurred to me some time ago, and which I do not think I have seen mentioned anywhere. The regurgitant stream from the left ventricle, one would think, would generate a pulse wave in the pulmonary veins, which might be reflected back to the neighbourhood of the mitral valve. This might have its own rhythmical period, which would probably not agree with the rhythmical period of the action of the left ventricle. When certain parts of these two periods coincided, the regurgitant stream from the ventricle might be met and opposed by the reflected wave, and then more blood might be thrown into the aorta than at other times.

I am, Sirs, yours truly,

W. W. COLBORNE.

Margate, April 11th, 1887.

ON PUNCTURE OF THE ABDOMEN FOR EXTREME FLATULENT DISTENSION IN PUERPERAL CASES.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of April 9th is the relation of an interesting illustration of the value of puncture of the abdomen for the relief of tympanites by Surgeon-Major Franklin, communicated through Dr. Priestley. He says: "The obstetric authorities—Playfair, Barnes, and Ramsbotham—gave him no help as to the way he was to relieve the extreme abdominal distension which was threatening the life of his patient"; so that after a consultation with Dr. Harris he punctured the ascending colon with a small trocar.

I am sure Surgeon-Major Franklin and Dr. Priestley will be gratified to learn that this treatment is fully discussed in the "System of Obstetric Medicine and Surgery" (vol. ii., 1885, p. 500) of myself and Dr. Fancourt Barnes in the following terms: "The treatment of tympanites is partly operative. The distress and danger attending tympanites are due in some measure to the great pressure from distension. This impedes respiration, circulation, and other functions. If the tension could be reduced, corresponding relief might be expected. Braxton Hicks advocated abdominal puncture with this intention (Obstetrical Transactions, 1868-69), and related cases in illustration. A small exploring trocar is the best instrument. By it the intestine is pierced in three or four of the most prominent points. As Hicks says, 'The pressure of the gas upon the sympathetic ganglia and nerves, and the tension of the tissues which they supply, add much to the collapse and vomiting. The least that can be claimed for the operation is that the last moments of the patient can be rendered comparatively free from suffering.' *We have adopted the plan, and can speak favourably of it.* It must never be forgotten that tympanites is not necessarily a fatal symptom; and it may well be that relieving this symptom may conduce to recovery."

Surgeon-Major Franklin's case bears happy confirmation to the truth of this observation.

I am, Sirs, yours faithfully,

ROBERT BARNES.

Harley-street, April, 1887.

PYREXIA.

To the Editors of THE LANCET.

SIRS,—In the paper of Dr. Maclagan on this subject I am much astonished at the criticism of Dr. Ord's paper. It seems that Dr. Maclagan has not quite grasped Dr. Ord's meaning.

It is now no new thought that the vital force is not a thing, but a state—a condition of delicate instability of organic compounds. These, assuming more stable conditions, liberate energy which, save in certain diseased conditions—e.g. delirium,—is not permitted to run wild, but is confined to definite channels and results. Here, then, are two processes: the raising of compounds from a stable to an unstable condition (analogous to the raising of a weight against the force of gravitation); and the opposite process—viz., the resolution of unstable into more stable compounds (analogous to the falling weight). Now, the principle of the conservation of energy applies everywhere, and in organic structures as in the purely physical world. What change of form of energy, then, has occurred during this raising of bodies to the sensitive instability of living tissues? This is Dr. Ord's question, it seems to me, and he replies thus: "This operation is the result of that form of energy called 'heat.' Heat disappears, and instead we find instability, or, as we may surmise, separation of atoms and molecules." In Dr. Maclagan's paper he states: "No evidence is adduced to support this. But there is much evidence, though chiefly on the physical side. Delicate tissue change, like all other change, can only result from other energy." The expression "absorption of heat" hardly expresses the actual physical process. The keynote of Dr. Ord's lecture is not absorption, but transformation. What was energy of motion (heat) becomes energy of position (the instability of higher tissue formation). In the building up of tissue day by day a large quantity of force must be required. If this building up cease, then this force is free, and escapes, as all force must, as heat. In fever tissue formation is lessened, and, unless disintegration be checked in proportion, heat must result. To regard heat as an excretory product is word-play. It is produced during retrograde tissue metamorphosis, but is not a product. In a similar way the remarks about the experiments on cucumbers are not to the point. The same processes occur in the animal as in the vegetable world, although the tissue changed may differ.

Dr. Ord's position is well based, not only physiologically, but physically. He points out the process of tissue formation and disintegration, although admitting that we do not know what is the controlling element. This check to tissue change is the secret of life; it is that which differentiates living from ordinary physical substances.

I am, Sirs, yours faithfully,

F. W. BENNETT, M.D. Lond.,
Assistant-Physician to the Leicester Infirmary.

DEGREES FOR LONDON STUDENTS.

To the Editors of THE LANCET.

SIRS,—It is a matter of deep regret that the plan for a united action on the part of University and King's Colleges, together with the two Royal Colleges, to form the new University of Westminster, and thus jointly to apply for a charter, was not proceeded with. For this scheme would apparently have solved most of the difficulties that at present surround the question of degrees for London students and that of a teaching university. It is most desirable that

the Charter should be obtained before October next, otherwise our London hospitals will have still fewer entries; indeed, a parent would be undoubtedly to blame if he did not so arrange his son's professional education as to enable him to get a degree after honest work. It is trying enough now for capable practitioners to hold their own against the crowds of Scotch and Irish graduates, but this competition will get still severer for the London student every year unless something is promptly done to give him an equivalent title.

I am, Sirs, your obedient servant,

April 12th, 1887. A PARENT.

THE RIVIERA IN 1887.

THE EARTHQUAKE.—MONTREUX.—LES AVANTS.

(By our Roving Correspondent.)

THOSE who, year after year, leave England for more genial climates have had strange experiences this season. Many no doubt who have encountered the severe trial of the earthquakes in the Riviera have thought that there is much truth in the refrain that "there is no place like home," and hundreds have sought refuge in the congenial spring of Great Britain from the worry and anxiety which necessarily surrounded all who found themselves in the unhappy district upon which such great calamities have come. Earthquakes, however, are not of every-day occurrence, and not easy to avoid, for we know that our own island is not altogether free from them, as the country near Colchester testified some three years since. The Riviera will be more or less empty for this season at least, but there is little doubt that its bright sun and lovely scenery and foliage will prove attractive enough to outweigh the unpleasant memories of February, 1887, and that in a year or so the normal and well-deserved popularity of the district will be restored. There is a silver lining to every cloud, it is said, and we may hope that the earthquake may bring some compensation to those who seek health and relaxation in the south of France. Many of the hotels have been rudely shaken, some few so severely that they will have to be rebuilt. When the repairs are undertaken, it is to be hoped that the proprietors will not be content with mere patching and a delusive hiding of dangerous cracks by a superficial daubing with untempered mortar. There is no doubt that many hotels have been "run up" at a great pace, and there is equally no doubt that many of them are thoroughly bad, both in design and workmanship. A sojourn in almost any of the hotels in the south of France is sufficient to show how flimsy are the parti-walls, which are often constructed of one layer of thin hollow bricks placed on edge, the surface being daubed with mortar. These parti-walls have no struts of timber running through them, and it is not to be wondered at that when the houses began to shake these flimsy divisions quickly broke, and fell on this side and that. These hollow brick partitions are excellent conductors of sound, and the occupant of any one room can generally hear through the wall the intimate conversation of those who inhabit the rooms on either side of him. Light sleepers are often unable to get their much-needed rest until their neighbours have gone to bed; and if they do not luckily fall asleep in the brief period which elapses between the talking and snoring of some Teutonic Stentor, an almost sleepless night is the consequence. Hotel proprietors must be made to know that quiet and rest are as important for invalids as are the quality of the food and air, and the parti-walls between the rooms in the hotels should be sufficiently solid to exclude sound and withstand the really moderate amount of vibration to which many have been subjected this year and may be again. The doors of communication between rooms and between rooms and corridors should in all cases be double, for the purpose of excluding noise. I have dwelt on the importance of this matter in previous letters, and no excuse is needed for again drawing attention to it. Speaking from a professional point of view, it seems most important that invalids should not be allowed to stop in any hotel where they cannot command rest and quiet at any hour they please.

Hotel staircases again demand attention. Most of the staircases in the south of France and Italy are of a kind which must be dangerous in case of fire or earthquake. Constructed, as they often are, of thin slabs of marble, supported on one side only, each step getting its outside support merely from the step below, it is obvious that if one step be cracked by fire or vibration and be shaken from its position, the whole structure is in great danger of coming down "with a run." This actually happened in many houses during the late earthquake, and it is to be hoped that during the work of reconstruction this important matter will be attended to. Architects are very prone to make a great feature of the staircase; and there can be no doubt that when travellers from the North, accustomed to narrow, steep, wooden stairs, are ushered into an hotel, and see before them a broad staircase of easy gradient, with steps of pure white marble running upwards in ten or a dozen flights, their minds are startled by the unaccustomed and palatial magnificence. The danger of such staircases, however, is often directly proportioned to their height and breadth, and we may hope that we have seen the last of them. Such staircases are often very undesirable channels for noise, and not unfrequently the smell of the kitchen ascends by them and pervades the whole house. Staircases should be constructed so that the steps are supported on both sides by walls, and if so constructed they would be comparatively safe in case of accident. In large hotels two staircases of moderate dimensions are better from every point of view than one, be it ever so broad and palatial in design. The staircases, kitchen, and sanitary offices should always be in a structure more or less distinct from the rest of the building, and thus the parts of the house devoted to living rooms would run no risk of being pervaded with air from kitchens, closets, or sinks. It need not be said that in the reconstruction of hotels what may justly be called the "unsanitary offices" will need to be remodelled. All sanitarians admit that in a water-carriage system of sanitation imperfectly carried out we have the very demon of pestilence, and foreign hotel keepers need to be reminded that a sprinkling of some carbolised powder and the use of a brush are no compensation for half-inch supply pipes, faulty traps, and no ventilation. It may be laid down as an axiom that a closet which stands in need of a brush and disinfectants must be a perpetual source of danger in a house, and travellers should be well aware of this fact before selecting a house in which to make a long sojourn. The introduction of water-carried sewage along the coast has made the foreshore unpleasant in many places, and those who walk upon the beach to get a "sniff of the briny," sniff a good many other things which are neither savoury nor sweet. It is needless to say that with the rapid increase of population the sewage evil is increasing, and must increase; and I have little hesitation in predicting that that locality which can find some means of efficiently treating its refuse other than washing it into the the sea will experience a rapid rise in popularity. The water-supply is for the most part above suspicion, and is obtained from sources high up in the Alpes Maritimes. The Nice Water Company supplies excellent water, not only to the city of Nice, but to other towns near it.

It may not be uninteresting to your readers to place upon record, now that the excitement of the catastrophe is overpassed, the actual experience of one who felt the earthquake in full, though not its fullest severity. He was located *au troisième* in an hotel standing on one of the highest points of the rock at Monte Carlo. After a lovely day, in which a powerful sun had been shining in a cloudless sky, he retired to rest. The noise of persons returning late from the carnival caused the night's rest to be a good deal disturbed. The final disturbances occurred at a few minutes before six, when he was awoke by a noise above, below, and on either side, which, on reflection, seems to be best likened to the labouring of ships at sea, and was doubtless due to the breaking of the various materials of which the house was built. The bedroom was distinctly rocking, and his first instinct was to jump out of bed to avoid rolling out. In a few seconds the house steadied, and then the mental question arose as to the cause of this rude disturbance. The window commanded the Bay of Monaco with the old town opposite and the district of La Condamine below lying between Monte Carlo and the old town. Looking out, the commencing colours of a glorious sunrise met the gaze, and from the old town, and from La Condamine, some 200 feet below, there arose a babel of voices of persons, doubtless inquiring of each other what was the matter. With the voices was intermingled the barking of innumerable dogs, that had been apparently as much surprised and startled as their owners. These facts made it apparent that

the disturbance had affected the whole locality, and a shock of earthquake seemed the only reasonable solution of the phenomena. Under the circumstances, it seemed advisable to get up (further sleep was certainly impossible, and the morning was tempting enough to call one from one's bed under any circumstances). Just as a rather hurried toilet was drawing to a close the second shock occurred, not so strong as the first, but only too distinct and most unpleasant, causing the house to creak and the windows to sway. Downstairs and into the open as quickly as possible seemed the reasonable course, for it is obvious that a house cannot stand many shocks such as we experienced, and it might happen that a third would cause it to give way. All the world was up and in the streets, the toilets being most peculiar and imperfect. Being up, what was to be done? It is difficult to know what can make one feel so utterly powerless as a shock of earthquake. No human power can prevent it; and when you have sought the open air, you have done all that is possible in the way of avoiding the possible consequences of further shocks. I have seen it stated in many of the papers that a condition of "panic" prevailed, but to this I should demur. Certainly I saw none, neither at Monte Carlo nor (later in the day) at Nice. That persons should get into the open air as quickly as possible was reasonable, and was distinct evidence of cool thought rather than panic. The question as to the cause, direction, &c., of the shock was naturally discussed, and when many persons discuss at once there is noise, but certainly there was no shrieking, and throughout the day I saw only one young girl who had "fainted," but as the colour of her cheeks was good, I concluded that she was merely "taking on," to use a common expression. The population of Monte Carlo is Franco-Italian, and might be assumed to be impressionable and excitable, but certainly they treated this unfortunate occurrence with the greatest *sangfroid*—a fact which made me suspect that this shock was a thing concerning which they were not without previous experience.

The amount of material damage sustained by the buildings at Monte Carlo was singularly small. The swaying of the houses had been sufficient to stop the clocks, but beyond this ominous fact there was little external evidence of the strain to which the buildings had been subjected. In the low-lying La Condamine, between the rocks of Monaco and Monte Carlo, there was more evidence of external damage, but even here the evidence was limited to a few fallen parapets and chimneys. In this part of the town the buildings are not so high, few being more than two or three storeys, and yet it was evident that these comparatively low houses had suffered more than the huge caravanserais perched on the rock of Monte Carlo. From facts which came to light subsequently it appeared that Monaco as a whole had suffered less than Mentone on the east and than Nice on the west. Mentone, being nearer to the centre of disturbance, might be expected to suffer more than Monaco; but Nice being further from the centre, ought, at first sight, to have suffered less. The reason, apparently, for the comparative escape of Monaco lies in the fact that, with the exception of La Condamine, the houses are built directly on the solid rock, while at Nice and Mentone a large proportion of the buildings are upon the alluvium which has been carried down by the torrents which intersect these cities. The trembling of the earth would cause more movement in the loose alluvium than the solid rock, and hence houses on the alluvial ground seem especially to have suffered.

An interesting point in connexion with the catastrophe was the difficulty in obtaining any accurate information as to the extent and severity of the trouble; in fact, it was not until the arrival of the English papers that the real facts became known. On inquiry at the telegraph office one learnt that the shock had been felt "all over France." It was said that Grasse was in ruins, that the shock had been terrible at Marseilles, and that a church had fallen at Mentone &c. In estimating the value of the current reports, it is needless to say that great allowance had to be made for the natural desire of hotel proprietors &c. to retain their guests, and to impress upon travellers that by moving in any direction they would be going out of the frying-pan into the fire. The fact of most value which enabled a judgment to be formed as to the probable focus of the disturbance was the blocking of the telegraph wires to the east, while they remained open to the west.

(To be concluded).

EDINBURGH.

(From our own Correspondent.)

UNIVERSITY OF EDINBURGH.

AT the approaching graduation ceremonial, the Senatus Academicus have decided to confer the honorary degree of LL.D. upon Professor von Kölliker, of Wurzburg. The degree was offered him on the occasion of the tercentenary celebrations, three years ago; but he was prevented from being present at the time. The degree is now to be conferred *in absentiâ*, as Professor Kölliker's feeble state of health precludes the possibility of his travelling such a distance at the present time.

PROPOSED UNIVERSITY HALL.

A need has of late been growingly felt in Edinburgh to provide the possibility of a more corporate and social college life for the students of the University than has up to the present obtained among them. With this view an association has now been formed, with Sir William Muir, Principal of the University, as its president, which will undertake the establishing of a number of halls of residence for the students as occasion seems to demand. A beginning has been made by securing a convenient block of buildings near the University buildings and the infirmary; these premises are to be prepared for the reception of students in the coming summer session. Rents of rooms are to be adjusted so as merely to cover expenses, and it is stated that desirable rooms are attainable at from 7*s.* 6*d.* to 15*s.* weekly by students anxious to join the colony. It is desired by the promoters of the scheme to combine some beneficial influence on the surrounding districts with the ordinary avocations and studies of the inmates of the hall; and it is stated that students interested in such work as is done at Toynbee Hall, London, by Oxford and Cambridge students, will obtain preference for their applications for entrance. Out of a total of 3500 students, it is probable that a sufficient number will be forthcoming to fill this hall, and possibly another should the first experiment be successful. If carefully managed its success is assured, and its establishment probably marks an important point of departure in our academic institutions.

THE FEVER EPIDEMIC.

The epidemic of scarlet fever dies out slowly, and the City Fever Hospital is still crowded with inmates. The report for the present week shows that of 244 cases in the wards 200 are cases of scarlatina.

CLINICAL INSTRUCTION IN FEVERS.

As the outcome of strong representations to the city authorities some months ago, it was decided to open the wards of the City Fever Hospital for the visitation of students; and a system of clinical instruction was inaugurated by Dr. Allan Jamieson, the visiting physician of the institution. The results up to the present have been highly satisfactory, and Bailie Russell, to whose efforts this improvement is largely due, was able to report recently to the Town Council that twenty-six students and four medical graduates had availed themselves of Dr. Jamieson's teaching during his first course of lectures, and that none of those attending had taken fever.

EDINBURGH UNIVERSITY COURT.

At its last meeting the Court confirmed the arrangements approved by the Senatus, under which Professor Haycraft, of the Mason College of Science, Birmingham, will take charge of the department of Physiology and superintend the teaching of the practical classes during the coming summer, in the absence of Professor Rutherford. The arrangements include the payment of £200 to Professor Haycraft by the Professor of Physiology.

THE NEW EXPERIMENTAL LABORATORY.

The new laboratory established by the Edinburgh Royal College of Physicians has already commenced its objective existence. A very convenient building, in close proximity to the infirmary and the medical schools, has been acquired, and will shortly be supplied with all the modern requirements of an experimental laboratory. The directorship of the new institution has not yet been filled up. Applications for the post were received by the committee in charge up to the end of last week, and it is anticipated

that the result of their deliberations will be shortly announced. Application has been made entirely by private letters addressed to the chairman of the Electing Committee, and testimonials have not been received on behalf of any of the candidates. Owing to the conditions of the contest, it is not definitely known how many competitors are in the field; but the names of Dr. Sims Woodhead, Dr. William Hunter, and Dr. Noël-Paton are mentioned as probably successful candidates. If these gentlemen are really among the competitors, the College has cause for congratulation in the *embarras de richesse* thus placed at its disposal; although the strong claims of each, based on the valuable work they have already accomplished, will make the decision a difficult one. The first task of the director, when appointed, will be to superintend the thorough equipment of the laboratories; subsequently his duties will chiefly consist in advising suitable lines of research and in organising the daily duties of his department. The laboratory and its success are the objects of great interest in Edinburgh, and there is every prospect that the new institution will form a useful channel through which the pent-up scientific energies of the school may freely develop themselves."

THE RECTORSHIP OF EDINBURGH UNIVERSITY.

The Marquis of Lothian, K.T., has been chosen by the University Conservative Association as their candidate for the Rectorship of the University, vacant through the death of the late Lord Iddesleigh. The date of the election is still nearly six months distant, but the Association is desirous of losing no time in placing their candidate before the constituency of undergraduates, and in conducting an active canvass in his behalf.

During the last six months a sum of £2750 has been received for the Royal Infirmary in the form of legacies.

Edinburgh, April 12th.

ABERDEEN.

(*From our own Correspondent.*)

THE CITY HOSPITAL.

AFTER a long and careful inquiry into the burning of a patient at the City Hospital, the Public Health Committee have issued a report, in which they state that they "are of opinion that the head nurse acted wrongly in placing the ward maid, Margaret Easton, in charge of the patient, knowing that Easton would be obliged to leave her several times quite alone for a period of from twenty to thirty minutes; they are further of opinion that the head nurse failed in her duty in not taking steps for securing a proper complement of nurses." It is also stated that, "in the opinion of the committee, it is matter of regret that the medical attendant did not report the occurrence earlier, and that after the accident took place he did not consider it requisite to visit the patient more frequently than once a day." The head nurse has sent in her resignation, which has been accepted. At a meeting of the Town Council, it was agreed, on the motion of the Lord Provost, to ask Surgeon-Major Fassor, superintendent of the Edinburgh Infirmary, to visit the hospital and report "as to what changes and improvements should be introduced for the purpose of placing the institution in a thoroughly efficient and satisfactory condition."

THE ROYAL INFIRMARY.

At a special meeting of the Committee of Management, held on the 8th inst., the Plans Committee submitted a revised design for the extension and improvement of the infirmary buildings. According to the proposed plan, the new building would accommodate 233 beds, with a cubic space of 1400 feet per bed. The approximate cost of the new design is £30,890. The "Jubilee Fund" now amounts to nearly £19,000.

ABERDEEN UNIVERSITY.

The last of the "professional examinations" took place to-day at Marischal College, and the graduation ceremony takes place on Friday, the 15th inst. The summer session commences on the 25th, and the preliminary examinations are to be held on the Friday and Saturday preceding. At a meeting of the Senatus held on the 2nd inst., Dr. Cash, recently appointed to the Chair of Materia Medica, was duly installed. At the same meeting it was resolved to provide an album for the purpose of receiving the signature of every student at matriculation and graduation. To-day's *Aberdeen Journal* says that "some correspondence has taken place recently between the University authorities and the Government with reference to a grant in aid of the extension of the University buildings. The sum needed to carry out the scheme is £84,000, and of this sum one-fourth was proposed to be raised locally. Information has been received that under existing circumstances (the smallness of the local efforts) the Lords of the Treasury cannot meet the wishes of Aberdeen."

ABERDEEN MEDICO-CHIRURGICAL SOCIETY.

Dr. McKenzie Booth has been elected librarian in room of the late Dr. William Fraser, and Dr. John Gordon succeeds the late Dr. Beveridge as treasurer to the Society.

Aberdeen, April 12th.

DUBLIN.

(*From our own Correspondent.*)

THE QUEEN'S JUBILEE.

SIR WILLIAM STOKES, President of the Royal College of Surgeons in Ireland, has issued cards for a dinner in celebration of Her Majesty's Jubilee. The banquet, which will be held in the College on Saturday, the 23rd inst., is expected to be a magnificent success, and will be attended by his Excellency the Lord-Lieutenant, his Serene Highness Prince Edward of Saxe-Weimar, the leading medical men in Dublin, and many others holding high official positions.

PROPOSED HOSPITAL FOR CONSUMPTION NEAR DUBLIN.

A subcommittee has been appointed by the Executive Committee of the City and County of Dublin Jubilee Committee, in order to select a suitable site for the proposed institution, and ascertain the cost of erecting the same, to provide accommodation for about twenty-five beds. Lord James Butler, the chairman of the Managing Committee of the Adelaide Hospital, has urged the necessity of establishing a convalescent home in connexion with that hospital, to be styled "The Jubilee Victoria Convalescent Home," under the same management, and has initiated the movement by a gift of £50.

UNIVERSITY OF DUBLIN.

The authorities of Trinity College, Dublin, by desire of Her Majesty, have arranged to allow credit for the Trinity Term examinations to all students, except candidates for the degree of Bachelor of Arts, whose names shall be on the College books at the dates fixed for their respective examinations.

NIGHT LECTURES.

The Standing Committee of the Royal University of Ireland on March 31st last adopted a resolution, to the effect that after that date certificates of night lectures would be refused by the University. This announcement came as a very disagreeable surprise to many hard-working students, who from no fault of their own may be prevented from attending day lectures; and, unless this objectionable rule is rescinded by the Senate, they will become ineligible for the next examinations of the University. The writer of this has lectured for some years to both day and night students, and can conscientiously state that for anxiety to learn, steadiness, and general good conduct, night pupils are in no way inferior to those attending the day classes. If the Senate enforce the carrying out of this resolution, a serious injury will be inflicted on a large and deserving class of medical students.

A bazaar and fancy fair in aid of Sir P. Dun's hospital will be held next week at the College of Physicians.

Dr. J. W. Swan died, on the 8th inst., at Clarinda Park, Kingstown, aged eighty-four years.

Dublin, April 12th.

NEW HOSPITAL IN WEST RENFREWSHIRE.—At a special meeting on the 7th inst. contracts were accepted for the erection of a combination hospital for the parishes of Houston, Kilbarchan, Erskin, and Inchrinen, including the burgh of Johnstone. The cost will be under £2000.

PARIS.

(*From our own Correspondent.*)

M. PASTEUR'S METHODS.

ON the 20th of last July a man named Hamyau, of Dunkirk, was bitten by a dog. On the 20th of the following month the same dog, at that time probably rabid, bit another man, who was forthwith sent to Paris and subjected to the intensive treatment. His death from paralytic rabies formed the subject of M. Peter's first communication to the Academy. Hamyau, who six months ago was a strong, vigorous man, is now suffering from a strange illness, which those favourable to M. Pasteur's treatment affirm to be pulmonary congestion. M. Peter, on the other hand, does not hesitate to declare that the symptoms are due to *canino-experimental* inoculation. Since the middle of February there has been paresis of the lower limbs and of the organs supplied by the pneumogastric nerve. The breathing is constantly oppressed, the pulse remains at 120, and the abdomen is tympanitic. Pressure made by M. Peter on the vagus gave rise to alarming dyspnœa and palpitation. The patient seldom passes a day without feeling neuralgic pains at the seat of the inoculations, but no abnormal sensation is felt in the scar of the bite. The symptoms have been somewhat relieved by the administration of pilocarpine in doses of fifteen grains daily, but M. Peter considers that the case will terminate fatally.

INOCULATION AGAINST PORCINE MEASLES.

A provincial paper relates another mishap, which is not uninstructive. A veterinary surgeon had been supplied with the preservative against porcine measles, and inoculated a herd of swine belonging to one of his clients. Unfortunately the pigs died, and the veterinary inoculator was obliged to reimburse their owner. The *Echo du Midi* says that he is about to bring an action for recovery against M. Pasteur.

PROPHYLAXIS OF YELLOW FEVER.

MM. Freire, Gibier, and Rebourgon presented a note at the Academy of Science on the Prophylaxis of Yellow Fever by the Inoculation of an Attenuated Virus. In 1885 and 1886, 6524 persons submitted themselves to this protective vaccination in Rio Janeiro, and during this period the total number of deaths from yellow fever was 1675. Of the victims 1667 had not been inoculated, the mortality amongst those protected amounting to eight deaths only. The authors state that, taking as the basis of their calculation the population exposed to the contagion, the percentage of deaths for the whole number was 1 per cent., whereas for those who had been subjected to preventive inoculations it was only 1 per 1000.

THE SLEEPER OF THENELLES.

The *Revue d'Hypnotisme* contains a report by Dr. Edgar Bérillon on *la Lethargique de Thenelles*, a young woman who will shortly have accomplished the fourth year of an uninterrupted trance. Miss M. B——, now twenty-five years of age, has always been sickly, delicate, and nervous. On May 30th, 1883, after a fright, she had several convulsive attacks, and then fell into a profound sleep, from which she has never awakened. She is kept alive by small quantities of liquid food, which are swallowed automatically. The excretions are greatly diminished, and menstruation is now entirely suppressed. When examined by Dr. Bérillon, the limbs were found to be much wasted, and all trace of adipose tissue had disappeared. Anæsthesia is complete, and the knee reflex is abolished. The pulse is almost imperceptible, and gives 100 beats to the minute. Respiration is regular, but feeble. The breath has not the autophagic odour of insanity and starvation. The face is pale, waxy, and without expression. The mucous membranes are colourless. When the eyelids are opened the eyes are seen to be convulsed upwards, and blowing upon them produces no palpebral reflex. The jaws are tightly closed by contracture of the masseters. The arms can be easily raised, but enter at once into contracture. The muscles are in that state known as neuro-muscular hyper-excitability, and the slightest touch or puff suffices to cause contracture, which can be removed by the application of warmth. Besides the sensory anæsthesia there is complete mental inertia, and the patient is inaccessible to any kind of hypnotic suggestion.

Paris, April 12th.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT a quarterly meeting of the Council held on Thursday last the minutes of the last meeting were confirmed. On the recommendation of the Museum Committee, it was determined to purchase a very fine specimen of the egg of the Epiornis.

Mr. James Berry, of 60, Welbeck-street, was awarded the Jacksonian Prize for his essay on "The Pathology, Diagnosis, and Surgical Treatment of Diseases of the Thyroid Gland."

The seventh report of the Committee on Charters and Bye-laws containing the draft of the new supplementary Charter to give effect to several alterations in the Charters agreed to by the Council, was approved and adopted, and it was resolved that the necessary proceedings be taken to submit the same to the Privy Council.

The resignation of Mr. Howse as Examiner in Anatomy was accepted.

Permission was given to the President to hold a private conversazione in the College in June next.

The Council having taken exception to the mode of advertisement of a Member, and he having sworn before a magistrate to cease from such practices, the Council agreed not to take further proceedings in the matter.

The proposal of the Committee of Delegates having been approved by the College of Physicians, authority was given to the delegates to erect a statue of the Queen in the Examination Hall, at the joint expense of the two Colleges.

It was referred to the President and Vice-Presidents to prepare an address of congratulation to Her Majesty on the completion of fifty years of her reign. Further memorials (one of them from Scotland) against the proposal from members of the medical profession and men of science to found a laboratory for the prosecution of pathological and physiological research were presented.

A resolution, proposed by Mr. T. Smith, was carried *nem. con.*—viz., "That a professional auditor be appointed to audit annually, in association with the committee of auditors, the College accounts."

Sir James A. Hanbury, K.C.B., of the Army Medical Staff, was elected a Fellow of the College, under Section 5 of the 15th Victoria, applicable to Members of twenty years standing.

Obituary.

CHARLES HUTTON, M.D. ST. AND., M.R.C.P.

DR. CHARLES HUTTON, late of 26, Lowndes-street, Belgrave-square, long engaged in the practice of obstetric medicine, died on the 27th of last month, after a short attack of acute bronchitis, at the age of sixty-nine. Dr. Hutton had for some time been in failing health; his last illness was apparently the result of a cold caught while employed on an errand rather of charity than duty on the night of March 13th.

Charles Hutton, M.D. St. And., was the youngest surviving son of the late William Hutton, Esq., of Beetham and Overthwaite, in the county of Westmoreland. The family was an old one, the property having descended from father to son for upwards of 300 years. Dr. Hutton studied at St. George's Hospital and Paris, and shortly after the completion of his studentship married in 1850 a daughter of the late Dr. Seymour, then one of the physicians of St. George's Hospital. This lady survives him with a son and two daughters. For many years Dr. Hutton was physician to the Hospital for Children and Women, Waterloo-bridge-road, and to the General Lying-in Hospital, York-road, Lambeth. During his long professional career he won the affection and esteem of all who knew him. He was a man of unblemished honour. He was most unselfish in all his proceedings, ever sympathising with and striving to relieve suffering, whether among rich or poor, regardless of his own profit or advantage. His patience and devotion were unwearied, and a wide circle of professional and private friends will sincerely lament his loss. Dr. Hutton was of a retiring nature, and, though of acknowledged skill in his special department, was

not successful enough to be able to leave a provision for his family. His long, honourable, and laborious life appears to have been inadequately rewarded. It is not impossible that some attempt may be made to relieve in some small measure the necessity of Dr. Hutton's family.

PIETRO CIPRIANI.

A PHYSICIAN and citizen of the first order has just been lost to Italy in the Senator Pietro Cipriani, who died at Florence on the 4th inst., in the seventy-ninth year of his age.

Born in San Piero a Sieve on Dec. 10th, 1808, as a boy he gave early indications of future distinction, and at the age of eighteen began his medical curriculum at the University of Pisa. He took the degree of Doctor in Medicine in 1832, and next year repaired to Florence for better means of clinical observation and research. He soon displayed remarkable skill in diagnosis and treatment, which led to his appointment as assistant-physician to the Florentine Hospital. This post he filled with increasing acceptance till August, 1835, when the cholera explosion at Leghorn summoned him thither to take charge of the lazaretto specially set apart for sufferers from that disease. His devotion to his heavy and hazardous duties was such that at the disappearance of the malady he was publicly thanked by the municipality; while the gratitude of the entire population towards him took the form of a gold medal struck in his honour.

Fresh from the cholera wards at Leghorn, he was welcomed back to Florence by the heads of the profession, and he became assistant in the Clinica Medica Generale to the illustrious Maurizio Bufalini. So highly did Bufalini estimate his clinical and expository powers, that on the frequent occasions when he had to be absent as a consultant, he delegated to young Cipriani the duties of the day in the ward and the lecture-room. Meanwhile, in great measure due to the rigid inductive teaching of Bufalini, medicine throughout Italy, and especially in Tuscany, was making signal advances, one effect of which was to separate from the general clinic such diseases as had asserted their claim to distinct and special consideration. Skin affections were one of these, and for the chair of "Malattie Cutanee," created for the first time in Florence, no fitter occupant was found than Cipriani, who, however, before entering on its duties, took care, with characteristic modesty and thoroughness, to qualify himself by a diligent course of study at the renowned dermopathic clinics of Vienna and Paris. It was in 1840 that Cipriani delivered his first course of lectures on the "Malattie Cutanee," and such an interest did he throw round his specialty that students from all parts of Italy came to listen to his prelections. He was not destined, however, to close his career in dermatology simply; for on the veteran Bufalini having, from age and ill-health, to resign his post at the head of the Florentine "Clinica Medica," Cipriani was selected as one of the only two Tuscan physicians who were worthy to take up the torch of the master. The duties that now devolved on him were arduous and complicated; but all difficulties faded before his chivalrous sense of honour, his indefatigable application, and his admirably disciplined powers.

He was too active a practitioner and too fastidious a writer to publish much; but as president of the Medical Faculty of the Florentine Institute he signalised himself as a sound critic and man of taste, and guided others to the path of authorship from which he shrank himself. In 1879 his health began to decline, and it was only after reiterated appeals to be relieved of his official duties that he was allowed to limit his activity to consultations merely. He continued, as Emeritus Professor and as occasional Assessor at the directing Council of the Florentine Institute, to give the profession the benefit of his experience and judgment, while his devotion to good works kept him to the last the chief promoter of the Blind Asylum of Florence. Sometimes, too, he would appear in Rome during great political crises and take his part as Senator in the deliberations of the "Patres Conscripti." But within the last few years the decline of health, the death of familiar friends, and not a little domestic affliction, withdrew him more and more from the public view, so that it was with much less surprise than sorrow that on the 5th inst. Italy received the news of his death.

JAMES BARRON, B.A., M.D.

IT is with sincere regret we have to announce the death of Dr. Barron, of Belfast, which took place at his residence in that city on the 2nd inst., under very sad circumstances, he having succumbed to typhus fever, a disease which has carried off so many Irish medical men, and which he contracted from a dispensary patient whom he was attending. Dr. Barron, who was a native of Antrim, was educated at the Belfast Medical School. He graduated in the Queen's University, and at his M.D examination was awarded a first class and the gold medal. Shortly after receiving his diploma he was appointed dispensary doctor at Templepatrick; but, being of an ambitious nature, he went to Belfast, and was elected house-surgeon at the Royal Hospital, a post which he held for several years, until, a vacancy having occurred in the surgical staff, he was appointed assistant-surgeon. He then began private practice in Belfast, and shortly afterwards resigned his hospital appointment on being chosen to take charge of one of the dispensary districts, an office which he held up to his decease. He was secretary of the Ulster Medical Society, and a short time ago was elected a member of the staff of the Ulster Hospital for Women and Children. Dr. Barron was thoroughly versed in all branches of the medical profession, and being a man of the most kindly disposition he was extremely popular with his brother practitioners, as well as with a large circle of patients and friends. It is melancholy to think that within a short interval two medical men in Belfast, living in the same district—Dr. Wadsworth and Dr. Barron—have both fallen victims to typhus fever. An immense number of medical men and other friends were present at the funeral, to show a last mark of respect to one who had become so deservedly popular.

G. BACON SWEETING, M.R.C.S., L.R.C.P. LOND.

THE death of this gentleman took place on March 25th, at Great Smeaton, in Yorkshire, where he had gone in search of health. For upwards of thirty years he occupied a prominent position in the profession at King's Lynn and the neighbourhood. Born at Bridport in Dorsetshire, on March 26th, 1824, he was apprenticed to his father, Mr. William Sweeting, himself a practitioner of considerable repute. After studying at University College, and subsequently in Paris, he entered the profession by taking the membership of the College in 1848. For some years he was engaged with Mr. Image, of Bury St. Edmunds, in active practice. In 1856 he went to reside at King's Lynn, and at once took a foremost place in the profession. Although engaged in general practice all his life, his opinion and aid as a consultant both in medical and surgical cases were constantly sought by his brother practitioners. The trust they thus bestowed in him was never betrayed, and so he succeeded up to the time of his death in successfully filling the difficult position of a consulting general practitioner. For a short time he was surgeon to the West Norfolk and Lynn Hospital, but finding the tax on his time too great, he retired, and was appointed consulting surgeon. He was a Fellow of the Royal Medical and Chirurgical and Chemical Societies. Of imposing presence, and possessing a fine physique, he was universally respected. He was an ardent lover of field sports. The late Mr. Sweeting was never married. He was actively engaged in practice until four weeks of his death, which took place within one day of his attaining his sixty-third year.

PROFESSOR LUIGI LAURENZI.

THIS able surgeon and teacher, the head of the Ospedale della Consolazione in Rome, died on the 5th inst., in circumstances distressingly sudden. He had made his usual morning visit to the wards, and had driven to his house in the Via Borgogna, when his coachman remarked that he alighted with great difficulty, and was deadly pale. The coachman accordingly made a signal to Madame Laurenzi, who happened to be at the window with her daughters, to come down at once. The lady descended forthwith, and with the aid of the coachman, succeeded in assisting her husband in-doors, though he attempted to conceal how ill he was, and deprecated her alarm. Within half an hour thereafter

he expired. Professor Laurenzi had, it seems, been suffering from urgent cardiac symptoms for some time, but such was his devotion to his patients and his pupils that, in spite of a very bad night, and contrary to the entreaties of his friends, he insisted on going that morning to the hospital.

His death is widely and deeply lamented. He was in the zenith of his powers, and his high reputation, acquired at the Consolazione by a long series of brilliant operations, had caused him to be respected and consulted as one of the soundest and most successful surgeons of Rome and the province. Some of his lectures and notes of interesting cases, reported in the *Gazzetta Medica di Roma*, had also carried his reputation beyond the Italian frontier. He was, moreover, very popular in the class-room, and a singularly pleasant and affable colleague.

He was buried in the Campo Verano on the morning of the 7th inst., the funeral *cortège* consisting of a numerous train of friends, colleagues, and representatives of the University and learned bodies. In the Piazza di Termini the procession paused for a space, and, according to custom, brief addresses were pronounced in his honour. The speakers were the veteran Dr. Filippo Scalzi and Prof. David Toscani, both of them equal to the melancholy task.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.—The following qualified candidates, having passed the final examination, have been granted the licence:—

Bridgwood, John Francis, Stafford.
Waite, Davis Allan, London.
Callender, Gerald, St. Mary's Hospital, London.
Wrentmore-Tucker, Robert Frank, Clifton, Bristol.
Farmer, William Henry Francis, London.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise on April 7th:—

Shute, George Sidney, Gillingham, Dorset.
Wedgwood, William Brackenbury, Fern Bank, East Dulwich.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Richard Watson Councell, Bristol School of Medicine; Geo. Andrew Gunton, St. George's Hospital.

The results of the Examination in Arts held at the Hall of the Society on March 3rd and 4th last have recently been published. There were 204 candidates, and from the Pass List it appears that 2 were placed in the First Class, 44 in the Second Class, and 116 were certified as having passed in some of the subjects, but not in all. The number of candidates was larger than on any former occasion, though the examination is held four times annually.

A FRESH outbreak of diphtheria is reported from Saltash.

IN the House of Commons on the 12th inst., the Aberdeen Infirmary and Lunatic Asylum Bill was read a second time.

HYDROPHOBIA: M. PASTEUR'S TREATMENT.—Senor Ramon was bitten by a wolf on Feb. 15th. M. Pasteur treated him for hydrophobia, but death has ensued.

PLANS have been selected for the proposed Ashburton and Buckfastleigh Cottage Hospital. The building will, it is estimated, cost £1200.

MIDDLESEX HOSPITAL.—The first Broderip scholarship at this institution has just been awarded to Mr. W. H. Vickery.

THE Duke of Bedford has intimated his intention of contributing £300 to the Endowment Fund of the Tavistock Cottage Hospital and Dispensary, which has recently been started.

REGISTRATION OF PLUMBERS.—Of nineteen journeymen plumbers examined at the last meeting of the examiners, nine candidates passed and ten failed to satisfy the examiners.

THE memorial stone of the new infirmary buildings to be erected for the parish of Birmingham was laid on the 31st ult. The building, which is designed on the pavilion principle, will cost about £70,000.

A GENERAL MEETING of the members of the London cab trade was held on the 8th inst., with a view of increasing the contributions to the Hospital Saturday collection.

THE recent performances at the Theatre Royal, Birmingham, on behalf of the local hospitals, realised £300, which will be distributed amongst the charities on the principle of the Hospital Saturday collection.

FRENCH PROTESTANT HOSPITAL, VICTORIA-PARK.—On Monday last a general court of governors and friends of this charity was held, and a report read which showed that much good work is being done through the agency of the hospital.

NAVAL MEDICAL SUPPLEMENTAL FUND.—At the quarterly meeting of the directors of the fund, held on the 12th inst., T. Russel Pickthorn, Esq., Inspector-General, in the chair, the sum of £53 was distributed among the several applicants.

THE usual monthly meeting of the Metropolitan Public Gardens Association was held on the 5th inst., when reports as to the progress of works in different parts of London which have been undertaken by the Association were presented.

THE Committee of the Manchester Southern Hospital are appealing to the public for funds to enable them to establish a lying-in hospital in connexion with that institution, the urgent need for which has been for some time recognised.

ROYALTY AT THE LONDON HOSPITAL.—On the 12th inst., his Royal Highness the King of the Belgians, accompanied by Sir Edmund Currie, paid a visit to the London Hospital. The King inspected many of the wards, and expressed himself highly pleased with the excellent hospital arrangements.

STRAY DOGS IN LONDON.—The number of stray dogs taken by the police during the month of March to the Dogs' Home was 1246. Twelve were killed in the thirty-one days in the London streets as mad or ferocious. Sixty-five persons, including two constables, were bitten during the same period.

THE "JOHN REID" MEDICAL PRIZE.—This prize, of the value of £25, founded by Miss Reid in memory of her brother, the late John Reid, surgeon, Glasgow, and awarded for the best original research bearing on any of the departments of medical science conducted in one of the hospitals or laboratories of Glasgow, has been gained by Mr. R. C. Wakefield for an able paper on "Aneurysm."

THE WOLVERHAMPTON NURSING INSTITUTE.—The Mayor (Mr. T. Vincent Jackson, F.R.C.S.) has received a communication from the Secretary of State, informing him that Her Majesty the Queen has consented to the proposed Nursing Institute, which is to be established in that town as a permanent local Jubilee commemoration, being named "The Queen Victoria Nursing Institute."

MEDICAL MAGISTRATES.—Robert Leamon Bowles, M.D., F.R.C.P., was sworn in on the 6th inst. at Canterbury as a Justice of the Peace for the county.—Robert Spence, M.B., Craigkennochy, Burntisland, has been placed on the Commission of the Peace for Fifeshire.—Dr. Evan Roberts, Penygroes, has been placed on the Commission of the Peace for Carnarvonshire, and qualified at the recent Easter Quarter Session for the county.

STOCKPORT INFIRMARY.—The annual meeting of the trustees of this institution was held on the 30th ult., when it was reported that 1660 out-patients, 825 home patients, 1052 cases of accidents, 621 in-patients, and 650 casualties without recommendation had been treated during the past year, making a total of 4808, against 5006 in 1885. The total amount of income was £3678, against £3492 in the preceding year, and the expenditure amounted to £2931.

ST. THOMAS'S HOSPITAL.—The testimonial to the retiring librarian, Mr. Denison, will be presented in the Library of the Medical School on Monday, May 16th, at 4.30 P.M. Dr. Ord, Dean of the School, will preside. The testimonial will consist of a clock, and a purse accompanied by an engrossed list of the subscribers. In order that the list may be ready, it is necessary that any who have not yet subscribed but intend to do so, should send in their names at once.

AN EASTER OFFERING TO THE BROMPTON HOSPITAL. On Sunday last, after a sermon at St. Peter's, Cranley-gardens, by the Rev. F. Byng, the sum of £56 was collected for the benefit of the funds of the above hospital.

THE JUBILEE.—In commemoration of the Jubilee it is proposed to found a convalescent home in connexion with the Adelaide Hospital, Dublin.—On the 6th inst. it was decided by a meeting of the inhabitants of Eastbourne to enlarge the Princess Alice Memorial Hospital.—It is expected that the foundation stone of the Royal Jubilee Children's Hospital, which is to be erected at Gateshead, will be laid early in June.

Births, Marriages, and Deaths.

BIRTHS.

HOLTHOUSE.—On the 10th inst., at Gower-street, the wife of Edwin Hermus Holthouse, F.R.C.S., of a son.

KIRKHAM.—On the 24th ult., at Downham, Norfolk, the wife of F. W. Kirkham, M.A., M.D., of a son.

SANDBERG.—On the 5th inst., at Liverpool Lodge, Brixton-hill, S.W., the wife of Arthur Sandberg, M.D., of a son.

SCOTT.—On the 1st ult., at Batu Gajah, Kinta, Perak, the wife of W. Duncan Scott, M.B., C.M., of a daughter.

STEVENSON.—On the 10th inst., at Camberwell-grove, Denmark-hill, the wife of Leader Stevenson, M.D., of a son.

WATNEY.—On the 8th inst., at Buckhold, Berks, the wife of Herbert Watney, M.D., of a son.

WEST.—On the 7th inst., at King Henry's road, N.W., the wife of J. Arthur West, M.R.C.S., L.R.C.P., of a son.

MARRIAGES.

FULLER—BLACK.—On the 12th inst., at St. Marylebone Church, Henry Roxburgh Fuller, M.D.Cantab., to Julia Louisa, second daughter of the late Patrick Black, M.D.

HENDLEY—BEAL.—On the 12th inst., at Jeypore, Rajoutana, India, Surgeon Harold Hendley, 7th Bengal Cavalry, to Emmie, second daughter of James Beal, of Roseneath, Hammersmith.

WHITE—CHALMER.—On the 13th inst., at Christ Church, Fulwood, Sheffield, by the Rev. A. G. Tweedie, M.A., John Sinclair White, M.D., F.R.C.S., to Evelyn, only daughter of Frederick Chalmer.

DEATHS.

EBERLE.—On the 8th inst., suddenly, John James Eberle, L.R.C.S., L.R.C.P.Ed., at Thirsk, Yorkshire, aged 40.

GLASSE.—On the 1st inst., at his residence, Queen's-road, Guernsey, Henry Dunn Glasse, late Deputy Inspector-General of Hospitals, Bombay Presidency, aged 73.

GOSTLING.—On the 3rd inst., at Naples, on his way home from Bombay, Henry Walter Gostling, M.R.C.S., L.R.C.P.E., aged 43.

GRENFELL.—On the 10th inst., at Penzance (from ear disease and purulent meningitis), Henry Grenfell, M.R.C.S., L.S.A.

HALLS.—On the 5th inst., at Courtfield-gardens, South Kensington, Thos. Edward Hornby Halls, M.R.C.S., aged 59.

PARKER.—On the 6th inst., at Shrivenham, Berks, Charles Gunning Parker, F.R.C.S., aged 76.

JACKSON.—On the 31st ult., at Brunswick-terrace, Brighton, after a short illness, John Jackson, M.D.Cantab., F.R.C.P., late of the Bengal Medical Service, aged 82.

WANE.—On the 5th inst., at Fitzjohn's-avenue, Hampstead, Daniel Wane, M.D., M.R.C.P., late of Grafton-street, Berkeley-square, aged 73.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ADAMS, JOSEPH, M.B., C.M.Ed., has been reappointed Medical Officer of Health for the Runcorn Rural Sanitary District.

AVERILL, C., M.R.C.S., L.S.A., has been appointed Junior House-Surgeon to the Macclesfield General Infirmary, vice Gell, promoted.

BUNCLE, ALEXANDER, M.B., C.M.Ed., has been reappointed Medical Officer of Health for the Featherstone and Pontefract Urban Sanitary Districts.

DE'ATH, GEORGE HANBY, M.R.C.S., L.R.C.P.Lond., has been re-appointed Medical Officer of Health for the Buckingham Urban Sanitary District.

DUDGEON, JOHN, M.D. Glas., has been appointed Physician and Private Secretary to His Excellency the Marquis Tseng at Pekin.

FLOWER, FREDERICK ISAAC, M.R.C.S., L.S.A., Medical Officer of Health for the Rural Sanitary District, has been appointed Medical Officer of Health for the Warminster Urban Sanitary District, vice Grubb, resigned.

FOWLER, JAMES, M.R.C.S., L.S.A., has been appointed Consulting Surgeon to the Clayton Hospital, Wakefield.

GAULT, ARTHUR H., L.R.C.P.Lond., M.R.C.S., has been appointed House-Surgeon to the Ashton-under Lyne District Infirmary.

GREEN, F. KING, F.R.C.S., L.S.A., has been reappointed Honorary Assistant Surgeon to the Royal United Hospital, Bath.

HEAP, CHARLES SYDNEY, M.R.C.S., L.K.Q.C.P.I., has been re-appointed Medical Officer of Health for the Swanage Urban Sanitary District.

HIRST, HERBERT, M.B., C.M.Edin., has been appointed Assistant House Surgeon to the Huddersfield Infirmary, vice L. Demetriadi, resigned.

HORSFALL, HENRY, M.D. St. And., M.R.C.S., has been reappointed Medical Officer of Health for the Bedale Rural Sanitary District, Yorkshire.

LATHAM, P. W., M.D.Cantab., F.R.C.P.Lond., has been reappointed Physician to Addenbrooke's Hospital, Cambridge.

LAWSON, J. BURNETT, M.D.Glas., has been elected Medical Officer for the Rothesay Parochial Board, vice Maddever, deceased.

MENZIES, WILLIAM FRANCIS, M.B., C.M.Edin., has been appointed Assistant Medical Officer to the Lancashire County Asylum, Rainhill.

MUDGE, THOMAS H. TRACEY, M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer of Health for the Paignton Urban Sanitary District, vice Stone, deceased.

O'CONNOR, JOHN, M.B.Dub., has been appointed Assistant House-Surgeon to the Portsmouth Hospital.

PEAKE, JOSEPH, L.F.P.S Glas., L.S.A., has been appointed interim Medical Officer to the Parochial Board of Falkirk, vice Hadden, deceased.

SCOTT, RICHARD J. H., M.R.C.S., has been reappointed Honorary Assistant Surgeon to the Royal United Hospital, Bath.

STANGER, WILLIAM, F.R.C.S.E., L.S.A., has been appointed Honorary Surgeon to the Clayton Hospital, Wakefield.

STEPHENS, EDWARD, L.R.C.P. Ed., M.R.C.S., has been reappointed Medical Officer of Health for the Chard Rural Sanitary District.

SYMES, E. WEST, M.D.Edin., M.R.C.S., has been appointed Surgeon to the Waterhouse's Charities and Blue Coat School, Halifax, vice Solomon Smith, M.R.C.S., &c., resigned.

WALKER, JOHN W., M.R.C.S., L.R.C.P.Lond., has been appointed Honorary Surgeon to the Clayton Hospital, Wakefield.

WALKER, L. NEWMAN, L.F.P.S.Glas., L.S.A., has been appointed by the Cape Government Medical Officer to the Zwartkops and Cookhouse Section of the Cape Government Railways, South Africa.

WILTON, JOHN PLEYDELL, M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Gloucester Port Sanitary District.

YOUNG, JAMES MARTIN, M.B., C.M.Aber., has been appointed Resident Surgeon to the Birmingham and Midland Eye Hospital.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BIRMINGHAM BORO' ASYLUM.—Resident Clinical Assistant. Board and residence are given, but no salary.

BRISTOL ROYAL INFIRMARY.—Assistant Resident Medical Officer and Pathologist. Salary £80 per annum, with board, lodging, and washing.

CHELSEA, BROMPTON, AND BELGRAVE DISPENSARY, Sloane-square, S.W. Surgeon.

CHESTER GENERAL INFIRMARY.—Visiting Surgeon. Salary to commence at £80 per annum, with residence and maintenance in the house.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—Resident Clinical Assistant. A gratuity of £20 is usually awarded at the close of the term of office (six months).

COUNTY AND BOROUGH OF CARMARTHEN INFIRMARY.—House-Surgeon. Salary £100 per annum, with board, lodging, fire, light, and washing.

CUMBERLAND INFIRMARY, Carlisle.—Assistant House-Surgeon. Salary £40 per annum, with board and lodging.

EASTERN FEVER HOSPITAL (METROPOLITAN ASYLUMS BOARD), The Grove, Homerton, E.—Assistant Medical Officer (Clinical Assistant) for a period of three months.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark-bridge-road, S.E.—House-Surgeon. Salary £70 per annum, with board, washing, and residence.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian-road, N.—Aural Surgeon. Also two Clinical Assistants.

HOLBORN UNION INFIRMARY, Archway-road, Upper Holloway, N.—Assistant Medical Officer. Salary £100 per annum, with board, lodging and washing.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, Bloomsbury, W.C.—Clinical Assistants in the Out-patient Department.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, Margaret-street, Cavendish-square, W.—Honorary Visiting Physician.

KIDDERMINSTER INFIRMARY.—House-Surgeon. Salary £140 (increasing by £10 per annum to £170), with rooms in the infirmary and attendance.

LIVERPOOL INFIRMARY FOR CHILDREN, Myrtle-street.—House-Surgeon. Salary £85 per annum, with board and lodging.

LONDON TEMPERANCE HOSPITAL, Hampstead-road, N.W.—Junior House-Surgeon. Board and residence in the Hospital.

QUEEN'S HOSPITAL, Birmingham.—Obstetric and Ophthalmic House-Surgeon. The appointment carries with it board, lodging, &c.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan.—Junior House-Surgeon. Salary £80 per year, apartments and rations (exclusive of wines, spirits, and washing).

WHITECHAPEL UNION INFIRMARY, Whitechapel, E.—Assistant Medical Officer (Resident). Salary £150 per annum, with furnished apartments, coal, gas, and washing.

Medical Diary for the ensuing Week.

Monday, April 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. C. B. Lockwood: On a Mode of Restraining Hæmorrhage during Operations upon the Tongue.—Mr. H. H. Clutton: A case of Catheter and Calculus removed by Lithotrity.—Dr. Angel Money: Renal Sarcoma in Infancy; is Surgery Justifiable?

Tuesday, April 19.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 1.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.

ROYAL INSTITUTION.—3 P.M. Mr. John Hopkinson: Electricity.

ROYAL STATISTICAL SOCIETY.—7.45 P.M. Mr. N. A. Humphreys: Class Mortality Statistics.

SOCIETY OF ARTS.—8 P.M. Major-General Sir Charles Warren: South Africa.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Messrs. Bowlby, Lockwood, W. Adams, Morgan, and Shattock: Specimens illustrative of Congenital Dislocation of the Hip.—Mr. Lunn: Disease of the Humerus.—Mr. Shattock: Fibrous Metaplasia of Bone.—Dr. A. H. Robinson: Osteitis Deformans.—Mr. Hutchinson: Destructive Arthritis of Knee without Suppuration.—Mr. Hutchinson, jun.: Sarcoma (?) of Knee.—Dr. Pitt: Carcinoma of Spine and Liver.—Dr. Coupland and Dr. Pasteur: Diffuse Sarcoma of Spinal Pia Mater (two cases).—Dr. Maguire: Interstitial Aneurysm of the Inter-auricular Septum. Card Specimens:—Mr. Fenwick: Tumour of the Bladder.—Dr. Willcocks: Congenital Malformation of the Heart.—Mr. Shattock: Tuberculous Disease of the Skin.

Wednesday, April 20.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.

SOCIETY OF ARTS.—8 P.M. Mr. A. Reckenzaun: Electric Locomotion

Thursday, April 21.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. Dewar: The Chemistry of the Organic World.

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. F. Treves: The Treatment of Wounds.—Dr. W. B. Hadden: Demonstration on Pathological Changes in the Brain and Spinal Cord.

Friday, April 22.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Bilton Pollard: Three cases illustrating the Difficulties in establishing Natural Respiration after Tracheotomy, and their Treatment by Tracheal Catheterisation.—Mr. Meredith: A case of Large Omental Lipoma successfully treated by Abdominal Section.—Mr. Godlee: Some cases of Abdominal Cyst following Injury.—Mr. B. Pitts: Abdominal Exploration for Chronic Intestinal Obstruction, Relief of Symptoms by Artificial Anus, subsequent Removal of a Growth involving Splenic Flexure of Colon, Recovery.

ROYAL INSTITUTION.—9 P.M. Sir Frederick Abel: The Work of the Imperial Institute.

Saturday, April 23.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. R. Von Lendenfeld: The New Zealand Alps.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments)

THE LANCET Office, April 14th, 1887.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apl. 8	30·11	N.E.	45	42	97	54	35	...	Fine
,, 9	30·19	N.E.	41	40	81	52	39	...	Overcast
,, 10	30·23	N.E.	43	39	81	50	38	...	Cloudy
,, 11	30·17	E.	46	43	99	60	36	...	Fine
,, 12	30·04	N.E.	43	41	92	65	37	...	Overcast
,, 13	30·11	E.	41	39	...	48	39	...	Overcast
,, 14	30·26	N.E.	39	36	82	63	34	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

THE PERTH INFIRMARY.

Humanitas writes to us to the following effect:—"The reference to Perth Infirmary in your last issue is calculated to convey a false impression. As a neutral party, but one who for many years has closely watched the course of events leading to this crisis, I can vouch for the fact that, with the exception of Drs. Stirling, Calder, and Graham, the whole of the medical profession in this city and county warmly espoused the cause of Dr. Bramwell. So strong is the feeling against the present infirmary management that a movement is on foot to erect a cottage hospital."

Junior.—1, 2, 3. Occasionally, but not often.—4. The data given are too scanty to warrant a definite conclusion.

Dr. Sheppard (Liverpool).—*Gazzetta degli Ospitali*, Corso Magenta, 48, Milan.

THE SLEEPING MAN.

To the Editors of THE LANCET.

SIRS,—This represents an extreme case of the loss of power resulting from shock, which, according to modern medical phraseology, may be termed "neurasthenia" or "neurosis." It will be interesting to observe to what extent Chauffat will recover his former health. It has too often happened that young women in a similar but not such an extreme condition have been treated with taunts, reproaches, and coercion, under the impression that they were wilful, obstinate, and shamming; in other words, that they were the subjects of hysteria, by which term the condition of neurosis has been erroneously designated. It cannot be too widely known that loss of physical and moral power is the essential characteristic of all such cases, and that the object of treatment should be to restore power and give a helping hand until the patients are able to help themselves. The effect of the maltreatment above mentioned has been to prolong such cases indefinitely, and aggravate them to any amount of intensity; and it must be understood for the future that such prolongation and aggravation are due to mismanagement, either domestic or medical, or both—in other words, that they are factitious.

I am, Sirs, your obedient servant,
Mansfield-street, W., April, 1887. D. DE BERDT HOVELL.

OXALIC ACID AS AN EMMENAGOGUE.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Jan. 29th last there is a paragraph about the emmenagogue action of oxalic acid. Can any of your readers tell me if it is of any benefit? I should like to try it. Is it a safe medicine?

I am, Sirs, yours truly,
April 11th, 1887. G. W.

THE MOXON MEMORIAL FUND.

PRESIDENT: Sir William Jenner, Bart., K.C.B., M.D., F.R.S. The following contributions have been received since those announced in THE LANCET of March 26th. All subscriptions should be forwarded to the Honorary Treasurer, R. Clement Lucas, B.S., F.R.C.S., 18, Finsbury-square, E.C., by whom they will be acknowledged, and cheques should be crossed "City Bank."

Fifth List.

Subscriptions announced	£541	0	6	H. C. Hilliard, M.D. ...	£1	1	0
R. S. Wilkinson, Esq., D.L., J.P.	5	5	0	D. D. Malpas, M.D. ...	1	1	0
T. Farries, Esq.	5	5	0	J. N. Cregeen, Esq. ...	1	1	0
Sir Henry Peek, Bart....	5	0	0	J. H. Evans, Esq. ...	1	1	0
Professor Odling, F.R.S.	3	3	0	F. G. Larkin, Esq. ...	1	1	0
W. H. Newnham, M.D.	2	2	0	M. C. Dalton, M.D. ...	1	1	0
R. L. Bowles, M.D. ...	2	2	0	C. J. Symonds, M.S. ...	1	1	0
T. F. Grimsdale, Esq. ...	2	2	0	C. Sangster, Esq. ...	1	1	0
W. Laidlaw Purves, Esq.	2	2	0	W. H. Allchin, M.D. ...	1	1	0
R. T. Ryle, M.D. ...	2	2	0	A. Gillingham, Esq. ...	1	1	0
F. Taylor, M.D.... ...	2	2	0	C. S. Ticehurst, Esq. ...	1	1	0
W. D. Smallpiece, Esq.	2	2	0	E. G. Hunt, Esq.... ...	0	10	6
John Cock, Esq.... ...	1	1	0	W. T. F. Davies, Esq. ...	0	10	6
John Orton, M.D. ...	1	1	0	J. T. Hinton, M.D. ...	0	10	6
J. Cooper Wilkinson, Esq.	1	1	0	M. H. P. Cuff, Esq. ...	0	10	6
R. A. Nell, Esq.... ...	1	1	0	H. Creswell, Esq. ...	0	10	0
Mrs. Nicholls	1	1	0	G. B. Chapman, Esq. ...	0	5	0

Convict.—Application should be made to the Directors or Commissioners of Prisons, and the appointments are in the hands of the chairman, Sir E. Du Cane.

Mr. C. Williams.—We are not aware, but will make inquiry.

FRIENDLY SOCIETIES' MEDICAL ASSOCIATIONS.

To the Editors of THE LANCET.

SIRS,—I have read with much interest the letters which have from time to time appeared in your columns on the above subject, and your own remarks upon them. While I entirely sympathise with you and your correspondents in the objects you have both at heart—viz., the maintaining the dignity of the medical profession, and increasing the remuneration of certain branches of it which are at present scandalously underpaid and overworked,—I take leave to doubt whether you are taking the best way to attain them when you attack the Friendly Societies' Medical Associations. I am myself surgeon to such an association. It will, perhaps, surprise some of your correspondents to hear that I find it a very pleasant and comfortable berth. I am not at all overworked, although the association includes between 2000 and 2500 members, the great majority of whom have wives and families whom I am expected to attend on the same terms as themselves. I have found them not merely reasonable in their demands, but almost invariably considerate and thoughtful. There is a managing committee of working men whose treatment of me has from the first been not only fair and just, but even courteous and gentlemanly. Subject only to the condition that my work be done, I am at liberty to arrange it exactly as I please, and I do not feel my present position to be one whit less independent than that of any brother practitioner who has to study the whims and humours of his private patients, while it is a thousand times more so than that of his assistant, with whom I would not change places for treble the salary he pays him. And that brings me, Sir, to the point of my letter, which is this: You will never effect any improvement in either the status or the remuneration of what may be called the lower ranks of the profession by attacking these associations, or trying to dissuade men from entering their service, while you have not a word of censure for the principal who, with an income of, say, £1000 a year, is not ashamed to offer £60, £70, or £80 to a "doubly qualified" man to become his drudge for that wretched pittance. Look at your own advertising columns! I remember well the time when I used to scan them weekly with a sinking, well-nigh hopeless heart. There, Sirs, is your mark; there is the real cancer to be cut out. Till that scandal is reformed you will attack all lesser abuses in vain. Do you seriously suppose that men will be deterred from accepting positions where, if they will only do their work reasonably well and exercise a little tact and common sense, they may easily be comfortable and independent, when in nine cases out of ten the only alternative is an assistancy with its poverty and drudgery? Why, I know a dozen assistants, men of excellent abilities, character, and qualifications, every one of whom is much harder worked and much worse paid than I am. Of course, I would have no objection to be better paid. I think the association get my services very cheap; they are by no means exempt from the common human weakness of being willing to take the maximum of work for the minimum of pay. But associations are not the worst offenders. Leave them alone for a little and turn your attention to the wealthy professional brother who makes a drudge of his assistant and pays him little more than the wages of his coachman. If you can make him ashamed of his meanness, you will earn the thanks of hundreds who need your sympathy and championship far more than does,

Yours truly,

Feb. 15th, 1887. M.O., F.S.M. Assoc.

ANOSMIA.

Senior Surgeon writes that recent letters on this subject which have appeared in our columns suggest to him that the case described may be one of ozæna, with probably diseased bone.

R. B. K.—Our correspondent will not be affected by the new Act.

LONGEVITY.

THE Berlin *Statistischen Korrespondenz*, by way of celebrating the Emperor of Germany's ninetieth birthday, has recently published a list of all the known persons in the Prussian kingdom who are older than the sovereign. At the taking of the census of Dec. 1st, 1885, there was one man of 120 years, another of 118 years; a woman of 117, another of 115; two women of 112; two men and one woman of 111; five women of 110; one man and four women of 109; three men and two women of 108; two men and ten women of 107; thirteen men and seven women of 106; and quite a large number who had attained to their 105th year. The total number of persons who gave their age at over 100 was 160. The Province of Silesia appears to be exceptionally favourable to longevity. Out of the 1073 male persons between their ninetieth and ninety-fifth year in all the Prussian provinces one in five is a Silesian, and out of the 306 men between 95 and 100 years old fifty-one are natives of Silesia. Out of the 2766 Prussian women between the ages of ninety and ninety-five, 371 are Silesians. There are ninety-nine women in Silesia between ninety-five and 100 years old and thirty Silesian women who have exceeded their 100th year. The centenarians are thickest in the district of Oppeln. They are also numerous in the Provinces of Posen and East Prussia; but the western dominions of the King of Prussia, and particularly the Rhineland and the manufacturing districts of Eberfeld, Crefeld, and the Dutch frontier, are not so favourable to extraordinary length of life. At Maidstone a maiden lady named Heathorn, known locally as the "Maid of Kent," has just entered upon her 105th year. She retains her good health and the use of all her faculties. She has a clear and accurate recollection of events which happened before Trafalgar was fought and won, and describes a visit she paid to the *Victory* before and one paid after the battle.

Roma.—The question would, we think, be more appropriately addressed to the editor of the *Queen*.

420.—We quoted the answer as given in the House.

Mr. Simeon Snell.—Soon.

THE INCOME TAX.

To the Editors of THE LANCET.

SIRS,—We are going to ask for a small space in your journal to remind your readers that now is the time for claiming relief and repayment of income tax in all cases where the profits for the past year have not amounted to the sum upon which tax was paid for the year ended April 5th. This claim can be made whether an appeal was made against the assessment or not, and if successful has the additional advantage that it fixes at the same time the assessment for next year necessarily at a lower figure than this year. From the numerous letters we have received in consequence of a letter in your columns mentioning our agency, we are more than ever convinced that medical men are scandalously over-assessed. In all cases where exemption is not claimed by reason of the income being under £150, we advise appeal being made to the Special Commissioners instead of to the District Commissioners. It ensures at the same time greater secrecy and better justice. Should the surveyor attempt to deny this privilege, we hope the fact will be at once reported to us, that we may take steps to have it allowed; we have, in fact, no less an authority than the assistant solicitor to the Inland Revenue to uphold our interpretation of the clause in the Act. As the time for claiming is very limited, notice should at once be given to the surveyor and accounts prepared for supporting the claim. Our special balance sheets have proved a great success, and where adopted last year have been again asked for this year. We require no better testimony to their usefulness.

We are, Sirs, your obedient servants,

THE INCOME TAX REPAYMENT AGENCY.

16, Artesian-road, W., April, 1887.

ERGOTINE IN INTERMITTENT FEVER.

To the Editors of THE LANCET.

SIRS,—In your issue of Feb. 19th, 1887, p. 391, I notice a remark under "Pharmacology and Therapeutics" as to the efficacy of ergotine in intermittent fever. I called attention to this fact in a short paper which I contributed to the *Practitioner* in the latter part, I think, of 1879. The main object of the paper was to point out the great value of arsenic in cases of metrorrhagia. The last paragraph of my paper runs as follows:—"The fact of the efficacy of quinine in ague, taken in conjunction with its action on the uterus led me to try ergot in cases of ague, and I found it extremely efficacious in checking the paroxysm." Since that time it has been my constant practice to use ergot in the milder cases of intermittent fevers with good effect.—I am, Sirs, yours faithfully,

Mecan Meer, March 20th, 1887. C. S. RANKING, M.D.

THE BROWN DEFENCE FUND.

To the Editors of THE LANCET.

SIRS,—Would you kindly allow me to acknowledge the following subscriptions received up to the present date in aid of the above fund? Lennox Browne, Esq., £1 1s.; Dr. Robert Barnes, £1; Dr. Holman (Reigate), £1 1s.; M. G. Biggs, Esq., 10s. 6d.; J. T. Boyd, Esq., 10s. 6d.

I am, Sirs, yours faithfully,

Meadow Side, 23, Upper Richmond-rd., Putney, April 13th, 1887. G. STANLEY MURRAY, M.D.

WIESEN AS A HEALTH RESORT FOR PHTHISIS.

To the Editors of THE LANCET.

SIRS,—I should be glad if you could find space for a few remarks relating to Wiesen in connexion with the article in THE LANCET of March 12th on "The High Altitude Treatment of Phthisis." Your correspondent in this article says: "We are still without definite statistical information on the results of treatment at Wiesen last winter." The time during which I have practised here has been too short for me to be able to furnish the statistics which your correspondent wishes for, nor have I as yet sufficient material to publish, though I hope before long to be able to give more exact information. But I may say that we have reason to be satisfied with the success already attained. Of thirty cases which have been under my observation this winter, the majority (about two-thirds of the cases) have made considerable progress, and even severe cases have done very well. When we ask whence this success arises, we can only attribute it to the peculiarly favourable and isolated position of the place, far from all disturbing sounds. It also enjoys, in addition to its pure air, the advantage of being a small health resort, where every step of the patient can be regulated and controlled by his doctor. There are here no opportunities for pursuing any pleasures which might be prejudicial, since there is nothing besides the two excellently arranged hotels from which the visitor can derive amusement. Certainly for those who have no great admiration for the beauties of nature and but few resources in themselves the place may appear somewhat dull. But he who realises how dependent recovery is on a well-ordered life, and how important it is to be healthy, will surely renounce willingly the pleasures of life for a short season in the interest of his health.

I am, Sirs, your obedient servant,

Wiesen, April 7th, 1887. P. BALZER, M.D.

Mr. E. D. McNicoll.—The matter is rather one for the advice of a solicitor. We should deprecate the publication of the correspondence in a local paper.

Mr. Harrold Fenn is thanked.

SHAM PATIENTS IN KENSINGTON.

To the Editors of THE LANCET.

SIRS,—The same thief who paid Dr. Longhurst a visit called at my house, evidently in pursuit of plunder. Having watched me out of the house, he rang the bell, and was allowed to remain in my consulting-room about two minutes. My wife, fortunately being in, asked what he wanted. He said it was a professional call, and that he would call at 3 o'clock in the afternoon. I need hardly say he did not return. He gave the name of "KERR," and went on to the house of my friend, Dr. Low, where he gained his object, pocketing a case of surgical instruments and a silver cigarette case. Such scamps ought to be "run in" at once, and have at least five years' penal punishment.

I am, Sirs, yours truly,

Earl's Court-road, W., April 12th, 1887. WOOD HILL.

Atropos.—We should not advise vaccination round a nævus in the situation described.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Rawdon Macnamara, Dublin; Dr. Dickinson, London; Mr. C. Mansell Moullin, London; Dr. Barnes, London; Mr. Haslam, Birmingham; Dr. Percy Boulton, London; Mr. Clement Lucas, London; Dr. Colcott Fox, London; Dr. Percy Kidd, London; Dr. Shea, Reading; Dr. Stanley Murray, Putney; Mr. Cantlie, London; Mr. Birchall, Liverpool; Mr. J. W. Walker, Wakefield; Mr. Phillpson; Messrs. Woodhouse and Rawson, London; Dr. Millar, Homerton; Mr. R. J. Callender, Haydon Bridge; Mr. Coates, Manchester; Dr. Byles, Eccleshall; Dr. Henry Skelton, Downend; Dr. W. J. Fleming, Glasgow; Dr. Clark Bell, New York; Mr. Stephenson, Norwood; Dr. Lewis, Canterbury; Dr. Tucker Wise, Wiesen; Dr. C. F. Knight, Dublin; Mr. A. Evans; Mr. Booth Clarkson, Liverpool; Mr. Jas. Turton, Brighton; Mr. J. A. Jones, Tir Caradoc; Dr. F. A. A. Smith, Cheltenham; Mr. A. E. Salter, Port Kennedy; Mr. T. Henderson, Rome; Mr. Keetley, London; Mr. Simeon Snell, Sheffield; Mr. A. Gray, Barrow-in-Furness; Dr. Ranking, Mean Meer; Dr. J. C. Steele, London; Dr. Fishbourne; Messrs. Dawson Bros., Montreal; Dr. Beaney, Melbourne; Mr. W. Robinson, Great Driffield; Mr. W. Curran, London; Mr. B. H. Thwaite; Mr. De Berdt Hovell, London; Dr. Holden, Preston; Dr. E. P. Thurstan, Tunbridge Wells; Mr. F. Alison, Launceston, Tasmania; Messrs. Hopkinson and Co., Nottingham; Mr. J. W. F. Rogers, London; Messrs. Smith and Sons, Weston-super-Mare; Dr. Colborne, Margate; Dr. Jacoby, New York; Mr. J. Hurll, Glasgow; Mr. Bell, Dover; Messrs. MacLachlan and Co., Edinburgh; Mr. L. Humphry, Cambridge; Messrs. Simpson and Co., London; Mr. Armstrong, Manchester; Dr. Colligan, New York; Mr. Landall, Bath; Mr. Munday, London; Mr. Woods, South Kensington; Dr. Kirk, London; Mr. Lister, Burnley; Messrs. Deacon and Co., London; Mr. MacArthur, Manchester; Messrs. Shanks and Co., London; Dr. Braithwaite, Rickmansworth; Messrs. Orridge and Co., London; Lieut.-Col. Graham, Bristol; Miss Proctor, Eastbourne; Dr. Prieger, Kreuznach; Mr. Dixon, Northampton; Mr. Blackwood, London; Dr. Skerritt, Bristol; Mr. Scott, Manchester; Mrs. Spencer, Ealing; Mr. Beach, London; Mr. MacMahon, Glasgow; Mr. White, Wolverhampton; Dr. Hawkings, Kirkburton; Messrs. Robertson and Scott, Edinburgh; Mr. Leitershofen, Homburg; Messrs. Street and Co., London; Mr. Pool, Shrewsbury; Mr. Edwards; Messrs. Spong and Co., Biggleswade; Mr. E. D. M'Nicoll, Southport; Dr. Clement Dukes, London; Mr. Musgrove, London; Mr. W. L. Strain; Mr. Wood Hill, London; Mr. Maynard, Newcastle-upon-Tyne; Messrs. Isaacs and Co., London; Mr. Cawen, Liverpool; Mr. Brett, Bridgend; Mr. B. B. Joll, Woolton; Mr. Aiken, Aberdeen; Dr. Reynolds, Ventnor; Mr. M. Collier, London; Mr. T. W. Coffin, London; Mrs. Taylor, Windermere; Mr. Elliott, Carlisle; Mr. Mark, Kidderminster; A Parent; Roma; Senior Surgeon; Resident Physician; 420; G. W.; Constant Reader; Carex; Atropos; Hand-in-hand Fire and Life Office; Lady Superintendent, Ipswich; Humanitas; A Former Surgeon of the Perth Infirmary; M.A., M.R.C.S., L.R.C.P. Ed.; Matron, Newcastle-on-Tyne; R. J. P. S.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Tilley, Queensland; Mr. Harbison, Victoria, Australia; Mr. Hearder, Newton Abbot; Mr. Royle, Jersey; Mr. Walker, Durham; Messrs. Benjamin and Son, London; Mr. Kemp, Hull; Dr. Knight; Mr. Topping, Forest Gate; Miss Hunter, Lowestoft; Mr. Howe, Hitchin; Mr. Appleyard, Yorks; Mr. McClelland, Glasgow; Mr. Buchanan, Wigan; Mr. Kirk, London; Mr. Gayley, Tipperary; Mr. Smith, Holloway; Mr. White, Bradford; Mr. Gimblett, London; Mr. Field, Bradford; Mr. Millson, Manchester; Mr. Howe, Balham; Mr. Lambton; Mr. Heywood, Manchester; Dr. Hunter, Matlock; Miss Minchin, Slough; Dr. Harding, Whittlesea; Mr. Rideal, London; Dr. Puega; Messrs. Benjamin and Son, London; Mr. Cripps, London; Mr. Harrild, Enfield; Mr. Ward, Wimbledon; Mr. Fielding, Rotherham; Mr. Dalgleish, Trowbridge; Mrs. Dearmer, Eastbourne; Mr. Winckworth, Thetford; X. Y. Z.; Alpha, London; M.D., London; A. B., Bridgend; Matron, West Bromwich; Cantab; F. N., Watford; R. N.; A. D. N.; D. M.; Lady Superintendent; Dr. D., Fulham; B.A., Clapham; Practical; H. G., London; Veritas, Reading; Medicus, Hove; Dr. D., Ingleton; K., Camden-town; H., Bradford; Chemicus; E. M., London; R. R. H., Birmingham; H. S. B., Brixton; Medicus, Hull; Medicus, Welshpool; Cardiac, Stafford; F. W. F., Coventry; M.B., Dublin; Lady Superintendent, Bath; Scalpel; Dr. E., Brixton; E. W., Barnsbury; J. B., Camberwell; F. B. J.; Sigma; Jack, Pimlico.

Lincolnshire Chronicle, Wakefield and West Riding Herald, Carnarvon and Denbigh Herald, Cork Examiner, Christian Commonwealth, &c., have been received.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year	£1 12 6	Six Months	£0 16 3
To CHINA AND INDIA		One Year	1 16 10
To THE CONTINENT, COLONIES, AND UNITED STATES		Ditto	1 14 8

Post Office Orders should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable at the Post Office, Charing-cross.

Notices of Births, Marriages, and Deaths are charged five shillings.

Cheques to be crossed "London and Westminster Bank."

ADVERTISING.

Books and Publications (seven lines and under)	£0	5	0
Official and General Announcements	0	5	0
Trade and Miscellaneous Advertisements	0	4	6
Every additional Line	0	0	6
Front Page, per Line	0	1	0
Quarter Page	1	10	0
Half a Page	2	15	0
An entire Page	5	5	0

The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom and all other Advertising Agents.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.